BOWDOIN COLLEGE

CATALOGUE FOR 1986-1987

BRUNSWICK, MAINE

August 1986

BOWDOIN COLLEGE

CATALOGUE FOR 1986-1987

BRUNSWICK, MAINE
August 1986

In its employment and admissions practices Bowdoin is in conformity with all applicable federal and state statutes and regulations. It does not discriminate on the basis of age, race, color, sex, marital status, religion, creed, ancestry, national and ethnic origin, physical or mental handicap.

The information in this catalogue was accurate at the time of publication. However, the College is a dynamic community and must reserve the right to make changes in its course offerings, degree requirements, regulations, procedures, and charges.

Bowdoin College supports the efforts of secondary school officials and governing bodies to have their schools achieve regional accredited status to provide reliable assurance of the quality of the educational preparation of its applicants for admission.

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College Calendar

1986 185th Academic Year

August 25, Monday. Rooms ready for occupancy.

August 25-28, Monday-Thursday. Orientation.

August 29, Friday. Fall semester begins at 8:00 A.M. All students required to be in residence. Freshman and upperclass registration.

August 29, Friday. Opening of College Convocation.

September 1, Monday. First classes of the fall semester.

October 10-11, Friday-Saturday. Meetings of the Governing Boards.

October 11, Saturday. Homecoming.

October 15, Wednesday. Fall vacation begins at the end of morning classes.

October 20, Monday. Fall vacation ends, 8:00 A.M.

October 24, Friday. James Bowdoin Day.

October 25, Saturday. Parents Day.

November 26, Wednesday. Thanksgiving vacation begins at the end of morning classes.

December 1, Monday. Thanksgiving vacation ends, 8:00 A.M.

December 1, Monday. Last day for filing applications for scholarship aid during the spring semester.

December 6-10, Saturday-Wednesday. Reading period.

December 11-17, Thursday-Wednesday. Fall semester examinations.

1987

January 14, Wednesday. First classes of the spring semester, 8:00 A.M.

March 6-7, Friday-Saturday. Meetings of the Governing Boards.

March 13, Friday. Spring vacation begins at the end of morning classes.

March 30, Monday. Spring vacation ends, 8:00 A.M.

March 30, Monday. Last day for filing applications for scholarship aid during the 1987-1988 academic year.

April 24, Friday. Last day for filing applications for graduate scholarships.

May 2-7, Saturday-Thursday. Reading period.

May 8-14, Friday-Thursday. Spring semester examinations.

May 22-23, **Friday-Saturday.** Meetings of the Governing Boards.

May 23, **Saturday.** The 182nd Commencement Exercises.

1987 **186th Academic Year**

August 31, **Monday.** Rooms ready for occupancy.

August 31-September 3, **Monday-Thursday.** Orientation.

September 4, **Friday.** Fall semester begins at 8:00 A.M. All students required to be in residence. Freshman and upperclass registration.

September 4, **Friday.** Opening of College Convocation.

September 7, **Monday.** First classes of the fall semester.

October 9-10, **Friday-Saturday.** Meetings of the Governing Boards.

October 10, **Saturday.** Homecoming.

October 14, **Wednesday.** Fall vacation begins at the end of morning classes.

October 19, **Monday.** Fall vacation ends, 8:00 A.M.

October 23, **Friday.** James Bowdoin Day.

October 24, **Saturday.** Parents Day.

November 25, **Wednesday.** Thanksgiving vacation begins at the end of morning classes.

November 30, **Monday.** Thanksgiving vacation ends, 8:00 A.M.

November 30, **Monday.** Last day for filing applications for scholarship aid during the spring semester.

December 12-15, **Saturday-Tuesday.** Reading period (at the option of each instructor).

December 16-22, **Wednesday-Tuesday.** Fall semester examinations.

1988

January 20, **Wednesday.** First classes of the spring semester, 8:00 A.M.

March 4-5, **Friday-Saturday.** Meetings of the Governing Boards.

March 18, **Friday.** Spring vacation begins at the end of morning classes.

April 4, **Monday.** Spring vacation ends, 8:00 A.M.

April 4, **Monday.** Last day for filing applications for scholarship aid during the 1988-1989 academic year.

April 29, **Friday.** Last day for filing applications for graduate scholarships.

May 7-12, **Saturday-Thursday.** Reading period (at the option of each instructor).

May 13-19, Friday-Thursday. Spring semester examinations.

May 27, Friday. Meetings of the Governing Boards.

May 28, Saturday. The 183rd Commencement Exercises.

1988 **187th Academic Year**

August 29, Monday. Rooms ready for occupancy.

August 29-September 1, Monday-Thursday. Orientation.

September 2, Friday. Fall semester begins at 8:00 A.M. All students required to be in residence. Freshman and upperclass registration.

September 2, Friday. Opening of College Convocation.

September 5, Monday. First classes of the fall semester.

October 7-8, Friday-Saturday. Meetings of the Governing Boards.

October 8, Saturday. Homecoming.

October 19, Wednesday. Fall vacation begins at the end of morning classes.

October 24, Monday. Fall vacation ends, 8:00 A.M.

October 28, Friday. James Bowdoin Day.

October 29, Saturday. Parents Day.

November 23, Wednesday. Thanksgiving vacation begins at the end of morning classes.

November 28, Monday. Thanksgiving vacation ends, 8:00 A.M.

November 28, Monday. Last day for filing applications for scholarship aid during the spring semester.

December 10-14, Saturday-Wednesday. Reading period (at the option of each instructor).

December 15-21, Thursday-Wednesday. Fall semester examinations.

1989

January 18, Wednesday. First classes of the spring semester, 8:00 A.M.

March 3-4, Friday-Saturday. Meetings of the Governing Boards.

March 17, Friday. Spring vacation begins at the end of morning classes.

April 3, Monday. Spring vacation ends, 8:00 A.M.

April 3, Monday. Last day for filing applications for scholarship aid during the 1989-1990 academic year.

April 28, Friday. Last day for filing applications for graduate scholarships.

May 6-11, Saturday-Thursday. Reading period (at the option of each instructor)

May 12-18, Friday-Thursday. Spring semester examinations.

May 26, Friday. Meetings of the Governing Boards.

May 27, Saturday. The 184th Commencement Exercises.

1986

SEPTEMBER

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1988

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The Purpose of the College

Bowdoin College believes strongly that there is an intrinsic value in a liberal arts education, for the individual student, for the College as an institution, and for society as a whole. Historically, the arrangement of courses and instruction that combine to produce liberal arts education has changed and undoubtedly will continue to change, but certain fundamental and underlying goals remain constant.

It is difficult to define these goals without merely repeating old verities, but certain points are critical. The thrust of a liberal arts education is not the acquisition of a narrow, technical expertise; it is not a process of coating young people with a thin veneer of "civilization." That is not to say that liberal arts education in any way devalues specific knowledge or the acquisition of fundamental skills. On the contrary, an important aspect of sound liberal arts education is the development of the power to read with critical perception, to think coherently, to write effectively, to speak with force and clarity, and to act as a constructive member of society. But liberal arts education seeks to move beyond the acquisition of specific knowledge and skills toward the acquisition of an understanding of man, nature, and the interaction of the two and toward the development of a characteristic style of thought which is informed, questioning, and marked by the possession of intellectual courage. When defined in terms of its intended product, the purpose of the College is to train professionally competent people of critical and innovative mind, who can grapple with the technical complexities of our age and whose flexibility and concern for humanity are such that they offer us a hope of surmounting the increasing depersonalization and dehumanization of our world. The College does not seek to transmit a specific set of values; rather, it recognizes a formidable responsibility to teach students what values are and to encourage them to develop their own.

Liberal arts education is, in one sense, general, because it is concerned with many different areas of human behavior and endeavor, many civilizations of the world, many different aspects of the human environment. It seeks to encourage the formation of habits of curiosity, rigorous observation, tolerant understanding, and considered judgment, while at the same time fostering the development of varied modes of communicative and artistic expression. This concern for breadth and for the appreciation of varying modes of perception is combined with a commitment to study some particular field of learning in sufficient depth to ensure relative mastery of its content and methods. In short, a liberal arts education aims at fostering the development of modes of learning, analysis, judgment, and expression which are essential both to subsequent professional training and to the ongoing process of self-

education by which one refines one's capacity to function autonomously as an intellectual and moral being.

To achieve these goals, the individuals who teach at the College must strive constantly to live up to their commitment in their course offerings; likewise students must have an equal commitment to do so in their course selections. The commitment is a collective one on the part of the entire college community. Each of the academic components of the College is under a heavy obligation to make its field of study accessible in some manner to the entire student body and to satisfy the needs of the nonmajor as well as those of the specialist.

The College is not and should not be a cloister or monastic retreat from the problems of the world. Rather, the College is a collection of people deeply and passionately involved in their community, their nation, and their world. When liberal arts education is faithful to its mission, it encourages and trains young people who are sensitive to the crucial problems of our time and who have the kind of mind and the kind of inspiration to address them fearlessly and directly. This is its goal and the standard by which it should be judged.

A statement prepared by the Faculty-Student Committee on Curriculum and Educational Policy, 1976.

Historical Sketch

Bowdoin College was established by charter from the General Court of Massachusetts on June 24, 1794, after repeated petitions to the commonwealth by citizens who wanted to provide educational opportunity in the District of Maine, then a rapidly growing frontier. Various names for the new institution were considered; the choice of "Bowdoin" was influenced both by a desire to honor the late distinguished governor of the commonwealth, James Bowdoin II, and by intimations received from his son, James Bowdoin III, of a substantial gift toward endowment. Brunswick was selected as the site for the College in 1796, but the erection of a building to house the College was not accomplished until 1802 because it had been difficult to convert into cash the lands that had been granted by the General Court. On September 2 of that year, the Reverend Joseph McKeen was installed as the first president of the College. In his inaugural speech, McKeen called upon those assembled to remember "that literary institutions are founded and endowed for the common good, and not for the private advantage of those who resort to them." On the next day Bowdoin began its active educational life with eight students and one faculty member in addition to the president.

The story of Bowdoin in its early years is an index to its entire history. Its first president was a man of religion and of science. Its first benefactor was a distinguished diplomat, statesman, and gentleman of broad culture; and the inheritance of his extensive library, his scientific instruments, and his fine collection of art established at the College a lasting conviction of the wisdom of strength in these areas of institutional resources. Its original Board was composed of strongly religious men, individually devoted to the Congregational Church as thoroughly as they were to the democratic ideals of a new nation.

The curriculum during the early years was rigidly prescribed and strong in the classics. In the field of science, mathematics was soon joined by the study of chemistry and mineralogy. Though small in size, the College had some of the greatest teachers it has known, and among the early graduates were several marked for future fame: for instance, Nathan Lord (1809), for thirty-five years president of Dartmouth; Seba Smith (1818), early humorist; Jacob Abbott (1820), prolific author of the "Rollo" books; William Pitt Fessenden (1823), for a short time President Lincoln's secretary of the treasury; Franklin Pierce (1824), fourteenth president of the United States; Nathaniel Hawthorne and Henry Wadsworth Longfellow, both of the Class of 1825; and John Brown Russwurm, of the Class of 1826, Bowdoin's first black graduate, publisher, and governor of the colony of Maryland in Liberia at the time of his death in 1851.

In 1820 the College established a medical school, which in the 101 years of its existence produced many well-trained doctors who practiced in Maine and, to a lesser extent, elsewhere. It is believed that two members of the Class of 1849 were among the first black doctors to receive medical degrees in the United States. In 1921, when the needed clinical facilities and technical equipment had become too complex and expensive for a small institution to supply, it was deemed expedient to discontinue the school.

Bowdoin was established more on faith than endowment, and its finances suffered severely in the aftermath of the panic of 1837. However, its growth was slow and steady. Social fraternities appeared on the campus in the 1840s, followed by organized athletics in the late 1850s. The *Bowdoin Orient,* which claims to be the oldest continuously published college weekly in the country, appeared first in 1871. As the controversy over slavery worked towards a climax, the home of Professor Smyth was a station of the "underground railroad" for escaped slaves; and here, in another professorial household, was written the book that was to arouse the conscience of a nation, *Uncle Tom's Cabin.* During the Civil War the College sent into the service a greater number of men in proportion to its size than any other college in the North.

The twenty years following the Civil War were the most critical in the history of the College. After President Harris's short term of four years (1867-1871), Joshua Lawrence Chamberlain, Maine's most distinguished war hero and governor of the state for four terms following his return to civilian life, was elected president. During these two administrations the curriculum was modernized somewhat, but the establishment of an engineering school in 1871 was unsuccessful, since it survived for only ten years. Its most famous graduate was Admiral Robert E. Peary (1877), who led the first expedition to reach the North Pole.

President Chamberlain, for all his great services to college, state, and nation, was unequal to coping with the difficulties now besetting the institution: inadequate endowment and equipment, a decreasing enrollment, dissension among the faculty and Boards. Probably no one else connected with either group could have succeeded in the circumstances. Chamberlain's resignation in 1883 provided an opportunity to secure from outside the College the vigorous leadership imperatively needed.

The inauguration in 1885, after a two-year interregnum, of the Reverend William DeWitt Hyde marks the real beginning of another era. He brought to his task of rejuvenating the institution a boundless physical capacity that was matched by his awareness of a modern and changing world and by scholarly ability that made his national reputation an ornament to Bowdoin. He built the College figuratively and literally, introducing new subjects into the curriculum and enlarging the physical facilities on the campus by over 100 percent. Under him, enrollment increased from 119 in 1885 to 400 in 1915 and the endowment rose from $378,273 to $2,312,868. He emphasized teaching

as the responsibility of the College and learning as the responsibility of the students. His vigor impregnated the whole life and spirit of the College. It was under President Hyde that Bowdoin's philosophy of its students and of its faculty members as responsible, independent individuals became fixed.

Kenneth C. M. Sills succeeded President Hyde after the latter's death in 1917. He was a natural successor (though not a slavish disciple) of President Hyde. He carried forward his predecessor's program, seeing the College successfully through the upheavals concomitant to two wars. Under him, Bowdoin gradually emerged from being a "country college" to a new and increasingly respected status as a countrywide college. Physical facilities were improved and increased. The faculty grew from thirty-two to eighty-one; enrollment, from 400 to double that figure; and endowment, from $2,473,451 to $12,312,274. Student activities were expanded, and the fraternity system was developed into a cooperative and democratic component of student life.

President Sills was succeeded by James Stacy Coles in the fall of 1952. During his fifteen-year tenure, Bowdoin met the rapidly changing demands of society and students by adopting curricular innovations, expanding the size of its faculty, and improving its facilities at a faster pace than during any comparable period in its history. It was during these years that Bowdoin thoroughly revised its curriculum, extended honors work to all gifted students, introduced independent study courses, initiated an undergraduate research fellowship program, and started its pioneering Senior Year Program. To accomplish these academic improvements, the College expanded the size of its faculty by over a third, to 109, and raised salaries to a level which has enabled it to continue attracting and retaining outstanding teachers. The value of the College's plant showed a similar dramatic increase. Dayton Arena, Morrell Gymnasium, Chamberlain Hall, Wentworth Hall, Coles Tower, Coleman Hall, Gibson Hall, and Hawthorne-Longfellow Library were constructed. Pickard Theater was constructed in Memorial Hall; Massachusetts Hall, Hubbard Hall, and three dormitories were renovated; and the Moulton Union and Dudley Coe Health Center were enlarged.

President Coles resigned at the end of 1967. Following the acting presidency of Athern P. Daggett, Roger Howell, Jr., a member of Bowdoin's Class of 1958, Rhodes scholar, and chairman of the Department of History, became the tenth president of the College on January 1, 1969. Only thirty-two at the time of his election, Dr. Howell had already achieved international eminence as a scholar of British history.

Under his leadership Bowdoin expanded its curriculum to include Afro-American studies, a major in biochemistry, and courses concerned with the environment. In 1970 it admitted women undergraduates and began an expansion of its enrollment from 950 to 1,350. Other accomplishments included the development of a highly sophisticated computing center, an increase in

student representation in the governance of the College, and the successful start of a ten-year, $37,775,000 fund-raising campaign.

President Howell resigned on June 30, 1978, and returned to full-time teaching at the College. Willard F. Enteman, provost of Union College, was inaugurated Bowdoin's eleventh president on September 22, 1978.

Dr. Enteman resigned on December 31, 1980, and Professor A. LeRoy Greason became Bowdoin's acting president on January 1, 1981. Dr. Greason, a graduate of Wesleyan University, holds graduate degrees from Harvard. He has been a member of the Department of English since 1952. During that time he also served as Dean of Students for four years and Dean of the College for nine years.

On October 9, 1981, Dr. Greason was inaugurated the twelfth president of Bowdoin College, the fourth member of the faculty to be named to the office.

During his presidency, distribution requirements have been reestablished and the curriculum has been revised to include a Department of Computer Science and Information Studies and to emphasize writing for freshmen and greater challenges for upperclassmen in advanced courses and in interdisciplinary programs. The Governing Boards have revised their by-laws to strengthen the presidency and to provide for a more effective development of policies. On May 25, 1984, the Governing Boards voted to launch a new capital campaign to increase endowment, enlarge the faculty, expand the scholarship fund, improve facilities, and meet other capital needs.

Officers of Government

PRESIDENT OF THE COLLEGE

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), President of the College.

THE PRESIDENT AND TRUSTEES

Everett Parker Pope, B.S., A.M. (Bowdoin), Chairman. Elected Overseer, 1961; elected Trustee, 1977. Term expires 1993.

Rosalyne Spindel Bernstein, A.B. (Radcliffe). Elected Overseer, 1973; elected Trustee, 1981. First term expires 1989.

Paul Peter Brountas, A.B. (Bowdoin), B.A., M.A. (Oxford), J.D., LL.B. (Harvard). Elected Overseer, 1974; elected Trustee, 1984. First term expires 1992.

Leonard Wolsey Cronkhite, Jr., A.B. (Bowdoin), M.D. (Harvard), LL.D. (Bowdoin, Northeastern), L.H.D. (Curry). Elected Overseer, 1969; elected Trustee, 1970. Term expires 1994.

William Plummer Drake, A.M., LL.D. (Bowdoin). Elected Overseer, 1955; elected Trustee, 1970. Term expires 1988.

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), President of the College, ex officio. Elected 1981.

Merton Goodell Henry, A.B. (Bowdoin), LL.B. (George Washington), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1974. Term expires 1990.

John Roscoe Hupper, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1970; elected Trustee, 1982. First term expires 1990.

Roscoe Cunningham Ingalls, Jr., B.S. (Bowdoin). Elected Overseer, 1968; elected Trustee, 1973. Term expires 1989.

John Francis Magee, A.B. (Bowdoin), M.B.A. (Harvard), A.M. (Maine). Elected Overseer, 1972; elected Trustee, 1979. First term expires 1987.

Jean Sampson, A.B. (Smith). Elected Overseer, 1976; elected Trustee, 1986. First term expires 1994.

Frederick Gordon Potter Thorne, A.B. (Bowdoin). Elected Overseer, 1972; elected Trustee, 1982. First term expires 1990.

Richard Arthur Wiley, A.B. (Bowdoin), B.C.L. (Oxford), LL.M. (Har-

vard). Elected Overseer, 1966; elected Trustee, 1981. First term expires 1989.

TRUSTEES EMERITI

James Stacy Coles, B.S. (Mansfield), A.B., A.M., Ph.D. (Columbia), D.Sc. (New Brunswick), LL.D. (Brown, Maine, Colby, Columbia, Middlebury, Bowdoin), Sc.D. (Merrimack). President of the College, 1952-1967; elected emeritus, 1977.

Sanford Burnham Cousins, A.B., LL.D. (Bowdoin). Elected Overseer, 1950; elected Trustee, 1959; elected emeritus, 1974.

David Watson Daly Dickson, A.B. (Bowdoin), A.M., Ph.D. (Harvard), L.H.D. (Bowdoin). Elected Overseer, 1966; elected Trustee, 1975; elected emeritus, 1982.

Leland Matthew Goodrich, A.B. (Bowdoin), A.M., Ph.D. (Harvard), Sc.D. (Bowdoin), LL.D. (Columbia). Elected Overseer, 1961; elected Trustee, 1966; elected emeritus, 1975.

Roger Howell, Jr., A.B. (Bowdoin), B.A., M.A., D.Phil. (Oxford), LL.D. (Nasson, Colby), L.H.D. (Maine), Litt.D. (Bowdoin). President of the College, 1969-1978; elected emeritus, 1978.

Jotham Donnell Pierce, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1963; elected Trustee, 1976; elected emeritus, 1984.

William Curtis Pierce, A.B. (Bowdoin), LL.B. (Harvard), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1967; elected emeritus, 1981.

Winthrop Brooks Walker, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1966; elected Trustee, 1970; elected emeritus, 1986.

Peter Charles Barnard, A.B. (Bowdoin), A.M. (Middlebury), Secretary. Elected 1977.

THE BOARD OF OVERSEERS

Norman Paul Cohen, A.B. (Bowdoin), J.D. (Harvard), President. Elected Overseer, 1977. Term expires 1989.

Norman Colman Nicholson, Jr., A.B. (Bowdoin), Vice President. Elected Overseer, 1979. Term expires 1991.

Thomas Hodge Allen, A.B. (Bowdoin), B. Phil. (Oxford), J.D. (Harvard). Elected Overseer, 1985. First term expires 1991.

Peter Charles Barnard, A.B. (Bowdoin), A.M. (Middlebury), Secretary of the President and Trustees, ex officio.

David Pillsbury Becker, A.B. (Bowdoin), A.M. (New York). Elected Overseer, 1986. First term expires 1992.

Theodore Hamilton Brodie, A.B. (Bowdoin). Elected Overseer, 1983. First term expires 1989.

George Hench Butcher III, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1985. First term expires 1991.

John Everett Cartland, Jr., A.B. (Bowdoin), M.D. (Columbia). Elected Overseer, 1976. Term expires 1988.

Kenneth Irvine Chenault, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1986. First term expires 1992.

William Francis Farley, A.B. (Bowdoin), J.D. (Boston College). Elected Overseer, 1980. First term expires 1986.

Robert Mason Farquharson, A.B. (Bowdoin), J.D. (Chicago). Elected Overseer, 1983. First term expires 1989.

Frank John Farrington, A.B. (Bowdoin), M.S. (The American College). Elected Overseer, 1984. First term expires 1990.

Herbert Spencer French, Jr., A.B. (Bowdoin), M.B.A. (Pennsylvania). Elected Overseer, 1976. Term expires 1988.

Paul Edward Gardent, Jr., B.S. (Bowdoin). Elected Overseer, 1975. Term expires 1987.

Leon Arthur Gorman, A.B., LL.D. (Bowdoin). Elected Overseer, 1983. First term expires 1989.

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), President of the College, ex officio.

Jonathan Standish Green, A.B. (Bowdoin), M.B.A. (California). Elected Overseer, 1975. Term expires 1987.

Marvin Howe Green, Jr. Elected Overseer, 1985. First term expires 1991.

Gordon Francis Grimes, A.B. (Bowdoin), B.A. (Cambridge), J.D. (Boston). Elected Overseer, 1986. First term expires 1992.

Laurie Ann Hawkes, A.B. (Bowdoin), M.B.A. (Cornell). Elected Overseer, 1986. First term expires 1992.

William Harris Hazen, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1981. First term expires 1987.

Caroline Lee Herter. Elected Overseer, 1976. Term expires 1988.

Regina Elbinger Herzlinger, B.S. (Massachusetts Institute of Technology), D.B.A. (Harvard). Elected Overseer, 1983. First term expires 1989.

Reverend Judith Linnea Anderson Hoehler, A.B. (Douglass), M.Div. (Harvard). Elected Overseer, 1980. First term expires 1986.

Dennis James Hutchinson, A.B. (Bowdoin), M.A. (Oxford), LL.M. (Texas, Austin). Elected Overseer, 1975. Term expires 1987.

Judith Magyar Isaacson, A.B. (Bates), A.M. (Bowdoin). Elected Overseer, 1984. First term expires 1990.

Donald Richardson Kurtz, A.B. (Bowdoin), M.B.A. (Columbia). Elected Overseer, 1984. First term expires 1990.

Albert Frederick Lilley, A.B. (Bowdoin), LL.B. (Virginia). Elected Overseer, 1976. Term expires 1988.

Herbert Mayhew Lord, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1980. First term expires 1986.

Diane Theis Lund, A.B. (Stanford), J.D. (Harvard). Elected Overseer, 1985. First term expires 1991.

George Calvin MacKenzie, A.B. (Bowdoin), M.A. (Tufts), Ph.D. (Harvard). Elected Overseer, 1986. First term expires 1992.

Cynthia Ann McFadden, A.B. (Bowdoin), LL.B. (Columbia). Elected Overseer, 1986. First term expires 1992.

Richard Allen Morrell, A.B. (Bowdoin). Elected Overseer, 1979. Term expires 1991.

Campbell Barratt Niven, A.B. (Bowdoin). Elected Overseer, 1986. First term expires 1992.

David Alexander Olsen, A.B. (Bowdoin). Elected Overseer, 1986. First term expires 1992.

Louis Robert Porteous, Jr., A.B. (Bowdoin), LL.D. (Portland School of Art). Elected Overseer, 1982. First term expires 1988.

Robert Chamberlain Porter, A.B. (Bowdoin), LL.B. (Pennsylvania). Elected Overseer, 1975. Term expires 1987.

Carolyn Walch Slayman, A.B. (Swarthmore), Ph.D. (Rockefeller), Sc.D. (Bowdoin). Elected Overseer, 1976. Term expires 1988.

John Ingalls Snow, A.B. (Bowdoin), M.B.A. (Wharton). Elected Overseer, 1986. First term expires 1992.

Phineas Sprague, A.B. (Bowdoin). Elected Overseer, 1985. First term expires 1991.

Terry Douglas Stenberg, A.B. (Bowdoin), Ed.M. (Boston University), Ph.D. (Minnesota). Elected Overseer, 1983. First term expires 1989.

Deborah Jean Swiss, A.B. (Bowdoin), Ed.M., Ed.D. (Harvard). Elected Overseer, 1983. First term expires 1989.

Raymond Stanley Troubh, A.B. (Bowdoin), LL.B. (Yale). Elected Overseer, 1978. Term expires 1990.

Timothy Matlack Warren, A.B. (Bowdoin). Elected Overseer, 1985. First term expires 1991.

Elizabeth Christian Woodcock, A.B. (Bowdoin), A.M. (Stanford). Elected Overseer, 1985. First term expires 1991.

OVERSEERS EMERITI

Charles William Allen, A.B. (Bowdoin), J.D. (Michigan), LL.D. (Bowdoin). Elected Overseer, 1967; elected emeritus, 1976.

Neal Woodside Allen, Jr., A.B. (Bowdoin), A.M., Ph.D. (Harvard). Elected Overseer, 1972; elected emeritus, 1984.

Willard Bailey Arnold III, A.B. (Bowdoin), M.S. (New York University). Elected Overseer, 1970; elected emeritus, 1984.

Charles Manson Barbour, A.B. (Bowdoin), M.D., C.M. (McGill). Elected Overseer, 1960; elected emeritus, 1977.

Richard Kenneth Barksdale, A.B. (Bowdoin), A.M. (Syracuse), A.M., Ph.D. (Harvard), L.H.D. (Bowdoin). Elected Overseer, 1974; elected emeritus, 1986.

Robert Ness Bass, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1964; elected emeritus, 1980.

Louis Bernstein, A.B., LL.D. (Bowdoin). Elected Overseer, 1958; elected emeritus, 1973.

Gerald Walter Blakeley, Jr., A.B. (Bowdoin). Elected Overseer, 1960; elected emeritus, 1976.

Matthew Davidson Branche, A.B. (Bowdoin), M.D. (Boston University). Elected Overseer, 1970; elected emeritus, 1985.

William Smith Burton, B.S. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1971. Elected emeritus, 1986.

Honorable William Sebastian Cohen, A.B. (Bowdoin), LL.B. (Boston University), LL.D. (St. Joseph, Maine, Western New England, Bowdoin, Nasson). Elected Overseer, 1973; elected emeritus, 1985.

Reverend Richard Hill Downes, A.B. (Bowdoin), S.T.B. (General Theological Seminary). Elected Overseer, 1970; elected emeritus, 1983.

Oliver Farrar Emerson II, A.B. (Bowdoin). Elected Overseer, 1974; elected emeritus, 1986.

Honorable Joseph Lyman Fisher, B.S. (Bowdoin), A.M., Ph.D. (Harvard), Sc.D. (Bowdoin), LL.D. (Allegheny), L.H.D. (Starr King School of Ministry). Elected Overseer, 1970; elected emeritus, 1985.

Roy Anderson Foulke, B.S., A.M., LL.D. (Bowdoin). Elected Overseer, 1948; elected emeritus, 1973.

Albert Edward Gibbons, Jr., A.B. (Bowdoin). Elected Overseer, 1973; elected emeritus, 1985.

Nathan Ira Greene, A.B. (Bowdoin). Elected Overseer, 1964; elected emeritus, 1980.

Peter Francis Hayes, A.B. (Bowdoin), B.A., M.A. (Oxford), A.M., M.Phil., Ph.D. (Yale). Elected Overseer, 1969; elected emeritus, 1983.

Honorable Horace Augustine Hildreth, A.B. (Bowdoin), LL.B. (Harvard), Ed.D. (Suffolk, Boston University, Temple), D.C.L. (Peshawar University, Pakistan), LL.D. (Maine, Bowdoin). Elected Overseer, 1953; elected emeritus, 1974.

William Dunning Ireland, Jr., A.B. (Bowdoin). Elected Overseer, 1971; elected emeritus, 1986.

Lewis Wertheimer Kresch, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1970; elected emeritus, 1983.

Malcolm Elmer Morrell, Jr., A.B. (Bowdoin), LL.B. (Boston University). Elected Overseer, 1974; elected emeritus, 1986.

Robert Warren Morse, B.S. (Bowdoin), Sc.M., Ph.D. (Brown), Sc.D. (Bowdoin). Elected Overseer, 1971; elected emeritus, 1986.

William Howard Niblock, B.S. (Bowdoin), A.M., Ed.M. (Harvard), L.H.D. (Nasson, Bowdoin). Elected Overseer, 1958; elected emeritus, 1975.

John Thorne Perkin, A.B. (Bowdoin). Elected Overseer, 1973; elected emeritus, 1985.

Payson Stephen Perkins, A.B. (Bowdoin). Elected Overseer, 1980; elected emeritus, 1986.

Thomas Prince Riley, A.B. (Bowdoin). Elected Secretary, 1955; elected emeritus, 1983.

Ezra Pike Rounds, A.B. (Bowdoin). Elected Overseer, 1952; elected emeritus, 1974.

Alden Hart Sawyer, B.S., LL.D. (Bowdoin). Elected Overseer, 1954; elected Treasurer, 1967; elected emeritus, 1979.

Alden Hart Sawyer, Jr., A.B. (Bowdoin), M.B.A. (Michigan). Elected Overseer, 1976; elected emeritus, 1985.

Robert Nelson Smith, Lieutenant General (Ret.), B.S. (Bowdoin), LL.D. (Kyung Hee University, Korea). Elected Overseer, 1965; elected emeritus, 1978.

Lewis Vassor Vafiades, A.B. (Bowdoin), LL.B. (Boston University). Elected Overseer, 1973; elected emeritus, 1979.

William David Verrill, A.B. (Bowdoin). Elected Overseer, 1980; elected emeritus, 1986.

George Curtis Webber II, A.B. (Bowdoin). Elected Secretary, 1983; elected emeritus, 1986.

Honorable Donald Wedgwood Webber, A.B. (Bowdoin), LL.B. (Harvard), L.H.D. (Bates, Defiance), LL.D. (Bowdoin, Maine). Elected Overseer, 1962; elected emeritus, 1979.

Harry Knight Warren, A.B. (Pennsylvania), Secretary. Elected Secretary, 1986.

COMMITTEES OF THE BOARDS

Joint Standing Committees*

Academic Affairs: John F. Magee, *Chairman;* Leonard W. Cronkhite, Jr., Roscoe C. Ingalls, Jr., David P. Becker, Leon A. Gorman, Jonathan S. Green, Judith M. Isaacson, Diane Lund, Carolyn W. Slayman; two faculty members to be appointed; Samuel B. Shepard '88, Lindsey R. Baden '87; alternate, Timothy D. Leland '89.

Audit: Richard A. Wiley, *Chairman;* Merton G. Henry, Herbert S. French, Jr., Regina E. Herzlinger, Albert F. Lilley.

Development: William H. Hazen, *Chairman;* Rosalyne S. Bernstein, William P. Drake, Richard A. Wiley, Marvin H. Green, Jr., Herbert M. Lord,

* The President of the College is ex officio a member of all standing committees except the Audit Committee.

Cynthia G. McFadden, David A. Olsen, L. Robert Porteous, Jr.; Clifton C. Olds and David S. Page; Michael W. King '88, Peter H. Quimby '89; alternates, Laura J. Klein '89, Nancy B. Salkin '89.

Executive: Everett P. Pope, *Chairman;* Rosalyne S. Bernstein, John R. Hupper, John F. Magee, Frederick G. P. Thorne, Thomas H. Allen, Norman P. Cohen, William H. Hazen; William B. Whiteside; Steven C. Munger '65.

Financial Planning: Rosalyne S. Bernstein, *Chairman;* Dennis J. Hutchinson, *Vice Chairman;* Paul P. Brountas, Jean Sampson, George H. Butcher III, Richard A. Morrell, Campbell B. Niven, John I. Snow, Raymond S. Troubh; William D. Shipman and one faculty member to be named; Robert H. Millar '62.

Honors: Norman P. Cohen, *Chairman;* William P. Drake, John F. Magee, Roscoe C. Ingalls, Jr., Gordon F. Grimes, C. Lee Herter, Judith L. Hoehler; Samuel S. Butcher; Stephen J. Curley '88; alternate, Anne Marie St. Peter '89.

Investments: Frederick G. P. Thorne, *Chairman;* Paul P. Brountas, Roscoe C. Ingalls, Jr., William F. Farley, Herbert S. French, Jr., Laurie A. Hawkes, Donald R. Kurtz, Norman C. Nicholson, Jr., Robert C. Porter; R. Wells Johnson; James N. Boudreau '87; alternate, Joy Ellen Stuart '88.

Nominating: Robert M. Farquharson, *Chairman;* Merton G. Henry, Jean Sampson, John E. Cartland, Jr., Elizabeth C. Woodcock; Barbara J. Kaster; Todd A. Feinsmith '88; alternate, Daniel Steinberg '87.

Physical Plant: Thomas H. Allen, *Chairman;* William P. Drake, Merton G. Henry, John R. Hupper, Theodore H. Brodie, Paul E. Gardent, Jr., Gordon F. Grimes, Albert F. Lilley, G. Calvin Mackenzie; William H. Barker and A. Raymond Rutan; David K. Bonauto '87, Anne A. Gannon '89; alternate, Ralph B. D'Agostino, Jr. '88.

Subcommittee on Social Responsibility: Timothy M. Warren, *Chairman;* Leonard W. Cronkhite, Jr., Frederick G. P. Thorne, Judith L. Hoehler; Jonathan P. Goldstein and William B. Whiteside; James N. Boudreau '87; alternate, Jonathan A. Halperin '89; Kenneth M. Cole III '69.

Student Affairs: John R. Hupper, *Chairman;* Jean Sampson, Frederick G. P. Thorne, Kenneth I. Chenault, Frank J. Farrington, Herbert M. Lord, Phineas Sprague, T. Douglas Stenberg, Deborah J. Swiss; Marilyn Reizbaum and James E. Ward III; Julianne Williams '88; alternate, Brian F. Hoffmann '89.

FACULTY REPRESENTATIVES

Associate Professor Cafferty (1987), Associate Professor Springer (1989), Professor Whiteside (1987), one faculty member to be elected by the Cur-

riculum and Educational Policy committee in September, and one faculty member to be elected by the faculty in September.

STUDENT REPRESENTATIVES

Trustees: Representatives to be appointed.

Overseers: Representatives to be appointed.

ALUMNI COUNCIL REPRESENTATIVES

Executive Committee: Steven C. Munger '65.

Trustees: Walter E. Bartlett '53 and Susan Williamson Peixotto '79.

Overseers: Michael S. Cary '71 and Thomas J. Sheehy, Jr. '41.

Officers of Instruction

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), President of the College and Professor of English. (1952)*

Albert Abrahamson, A.B. (Bowdoin), A.M. (Columbia), Sc.D. (Bowdoin), George Lincoln Skolfield, Jr., Professor of Economics Emeritus. (1928)

Philip Conway Beam, A.B., A.M., Ph.D. (Harvard), Henry Johnson Professor of Art and Archaeology Emeritus. (1936)

Ray Stuart Bicknell, B.S., M.S. (Springfield), Coach in the Department of Athletics Emeritus. (1962)

Kenneth James Boyer, A.B. (Rochester), B.L.S. (New York State Library School), College Editor Emeritus. (1927)

Herbert Ross Brown, B.S. (Lafayette), A.M. (Harvard), Ph.D. (Columbia), Litt.D. (Lafayette, Bowdoin), L.H.D. (Bucknell), LL.D. (Maine), Professor of English and Edward Little Professor of Rhetoric and Oratory Emeritus. (1925)

Philip Meader Brown, A.B. (Brown), A.M. (Stanford), Ph.D. (Harvard), Professor of Economics Emeritus. (1934)

Richard Leigh Chittim, A.B. (Bowdoin), B.A., M.A. (Oxford), Wing Professor of Mathematics Emeritus. (1942)

James Stacy Coles, B.S. (Mansfield), A.B., A.M., Ph.D. (Columbia), D.Sc. (New Brunswick), LL.D. (Brown, Maine, Colby, Columbia, Middlebury, Bowdoin), Sc.D. (Merrimack), President of the College Emeritus. (1952)

Louis Osborne Coxe, A.B. (Princeton), Pierce Professor of English Emeritus. (1955)

Paul Gifford Darling, A.B. (Yale), A.M. (New York University), Ph.D. (Columbia), Professor of Economics Emeritus. (1956)

Edward Joseph Geary, A.B. (Maine), A.M., Ph.D. (Columbia), hon. M.A. (Harvard), Longfellow Professor of Romance Languages Emeritus. (1965)

Lawrence Sargent Hall, A.B. (Bowdoin), A.M., Ph.D. (Yale), Henry Leland Chapman Professor of English Literature Emeritus. (1946)

Daniel Francis Hanley, A.B. (Bowdoin), M.D. (Columbia), Sc.D. (Bowdoin), College Physician Emeritus. (1946)

* Date of first appointment to the faculty.

Paul Vernon Hazelton, B.S. (Bowdoin), Ed.M. (Harvard), Professor of Education Emeritus. (1948)

Ernst Christian Helmreich, A.B. (Illinois), A.M., Ph.D. (Harvard), Thomas Brackett Reed Professor of History and Political Science Emeritus. (1931)

Cecil Thomas Holmes, A.B. (Bates), A.M., Ph.D. (Harvard), Wing Professor of Mathematics Emeritus. (1925)

Charles Ellsworth Huntington, A.B., Ph.D. (Yale), Professor of Biology Emeritus. (1953)

Myron Alton Jeppesen, B.S. (Idaho), M.S., Ph.D. (Pennsylvania State), Professor of Physics and Josiah Little Professor of Natural Science Emeritus. (1936)

Helen Buffum Johnson, Registrar Emerita. (1943)

Fritz Carl August Koelln, Ph.D. (Hamburg), Professor of German and George Taylor Files Professor of Modern Languages Emeritus. (1929)

Samuel Appleton Ladd, Jr., B.S. (Bowdoin), Director of Career Counseling and Placement Emeritus. (1944)

Donovan Dean Lancaster, A.B. (Bowdoin), Director of the Moulton Union and the Centralized Dining Service Emeritus. (1927)

Eaton Leith, A.B. (Dartmouth), A.M. (Harvard), Professor of Romance Languages Emeritus. (1936)

Matilda White Riley, A.B., A.M. (Radcliffe), Sc.D. (Bowdoin), Daniel B. Fayerweather Professor of Political Economy and Sociology Emerita. (1973)

Thomas Auraldo Riley, A.B. (Bowdoin), A.M. (Yale), Ph.D. (Harvard), Professor of German Emeritus. (1939)

Geoffrey Robert Stanwood, B.S. (Bowdoin), Assistant to the President Emeritus. (1972)

Kathryn Drusilla Fielding Stemper, A.B. (Connecticut College), Secretary to the President Emerita. (1957)

Manuel Aurelio Alvarez, A.B., A.M., J.D. (Yale), Assistant Professor of Romance Languages. (1985)

John William Ambrose, Jr., A.B., A.M., Ph.D. (Brown), Joseph Edward Merrill Professor of Greek Language and Literature. (1966)

William Henry Barker, A.B. (Harpur College), Ph.D. (Massachusetts Institute of Technology), Associate Professor of Mathematics. (1975)

Richard Kenneth Barksdale, A.B. (Bowdoin), A.M. (Syracuse), A.M., Ph.D. (Harvard), Visiting Professor of English on the Tallman Foundation. (1986)

Robert Kingdon Beckwith, B.S. (Lehigh), M.S. (Juilliard), Professor of Music. (1953)

Susan Elizabeth Bell, A.B. (Haverford), A.M., Ph.D. (Brandeis), Assistant Professor of Sociology. (On leave of absence in the spring semester.) (1983)

Augusta Lynn Bolles, A.B. (Syracuse), M.A., Ph.D. (Rutgers), Associate Professor of Anthropology and Director of the Afro-American Studies Program. (On leave of absence in the spring semester.) (1980)

Barbara Weiden Boyd, B.A. (Manhattanville), M.A., Ph.D. (Michigan), Associate Professor of Classics. (On leave of absence.) (1980)

Boris Briker, M.A. (University of Chernovtsy), Visiting Instructor in Russian. (1986)

Gabriel John Brogyanyi, A.B. (Columbia), A.M., Ph.D. (Cornell), Associate Professor of Romance Languages. (1968)

Franklin Gorham Burroughs, Jr., A.B. (University of the South), A.M., Ph.D. (Harvard), Associate Professor of English. (1968)

Samuel Shipp Butcher, A.B. (Albion), A.M., Ph.D. (Harvard), Professor of Chemistry. (1964)

Charles Joseph Butt, B.S., M.S. (Springfield), Coach in the Department of Athletics and Director of the Curtis Pool. (1961)

Helen Louise Cafferty, A.B. (Bowling Green), A.M. (Syracuse), Ph.D. (Michigan), Associate Professor of German. (1972)

Steven Roy Cerf, A.B. (Queens College), M.Ph., Ph.D. (Yale), Associate Professor of German. (1971)

Timothy Cheek, B.A. (Australian National University), M.A. (Virginia), Visiting Instructor in History. (1986)

Ronald L. Christensen, A.B. (Oberlin), A.M., Ph.D. (Harvard), Associate Professor of Chemistry. (1976)

Dorothy Patricia Coleman, A.B., A.M. (Northern Illinois), Ph.D. (Pennsylvania), Assistant Professor of Philosophy. (1984)

Rachel Ex Connelly, A.B. (Brandeis), A.M. (Michigan), Assistant Professor of Economics and Dana Faculty Fellow. (1985)

Denis Joseph Corish, B.Ph., B.A., L.Ph. (Maynooth College, Ireland), A.M.

(University College, Dublin), Ph.D. (Boston University), Associate Professor of Philosophy. (1973)

Thomas Browne Cornell, A.B. (Amherst), Professor of Art. (On leave of absence in the fall semester.) (1962)

Herbert Randolph Coursen, Jr., A.B. (Amherst), A.M. (Wesleyan), Ph.D. (Connecticut), Professor of English. (1964)

John D. Cullen, A.B. (Brown), Coach in the Department of Athletics and Director of Intramural Athletics. (1985)

Judith M. Dean, A.B. (Gordon), A.M., Ph.D. (Cornell), Assistant Professor of Economics. (1983)

Gregory Paul DeCoster, B.S. (Tulsa), Ph.D. (Texas), Assistant Professor of Economics. (1985)

Eugenia Caroline DeLamotte, A.B. (Duke), B.A., M.A. (Oxford), A.M., Ph.D. (Harvard), Assistant Professor of English. (On leave of absence.) (1982)

Patsy S. Dickinson, A.B. (Pomona), M.S., Ph.D. (Washington), Assistant Professor of Biology. (1983)

Peter E. Doan, B.A. (St. Olaf), Visiting Instructor in Chemistry. (1986)

Linda Louise Docherty, B.A. (Cornell), M.A. (Chicago), Ph.D. (North Carolina), Assistant Professor of Art and Dana Faculty Fellow. (1986)

Kevin Michael Donahue, A.B. (Richmond), M.F.A. (Brooklyn), Visiting Assistant Professor of Art. (1982)

Stephen Thomas Fisk, A.B. (California, Berkeley), A.M., Ph.D. (Harvard), Associate Professor of Mathematics. (1977)

John M. Fitzgerald, A.B. (Montana), M.S., Ph.D. (Wisconsin), Assistant Professor of Economics. (On leave of absence.) (1983)

Liliane P. Floge, A.B. (City College of New York), M. Phil., Ph.D. (Columbia), Assistant Professor of Sociology. (1980)

Albert Myrick Freeman III, A.B. (Cornell), A.M., Ph.D. (University of Washington), Professor of Economics. (1965)

Geraldine Sima Friedman, A.B. (Princeton), M. Phil., Ph.D. (Yale), Assistant Professor of English. (1985)

Alfred Herman Fuchs, A.B. (Rutgers), A.M. (Ohio), Ph.D. (Ohio State), Dean of the Faculty and Professor of Psychology. (1962)

William Davidson Geoghegan, A.B. (Yale), M.Div. (Drew), Ph.D. (Columbia), Professor of Religion. (1954)

Timothy J. Gilbride, A.B. (Providence), M.P.A. (American International), Coach in the Department of Athletics. (1985)

Jonathan Paul Goldstein, A.B. (New York, Buffalo), A.M., Ph.D. (Massachusetts), Assistant Professor of Economics. (1979)

Celeste Goodridge, B.A. (George Washington), M.A. (William and Mary), Ph.D. (Rutgers), Visiting Assistant Professor of English. (1986)

Peter Thomas Gottschalk, A.B., A.M. (George Washington), Ph.D. (Pennsylvania), Professor of Economics. (1977)

Robert Kim Greenlee, B.M., M.M. (Oklahoma), Ph.D. (Indiana), Assistant Professor of Music. (1982)

Robert John Griffin, A.B. (Tel Aviv), A.M., M.Phil, Ph.D. (Yale), Assistant Professor of English. (1983)

Charles Alfred Grobe, Jr., B.S., M.S., Ph.D. (Michigan), Professor of Mathematics. (On leave of absence.) (1964)

Barbara S. Held, A.B. (Douglass), Ph.D. (Nebraska), Associate Professor of Psychology. (1979)

James Lee Hodge, A.B. (Tufts), A.M., Ph.D. (Pennsylvania State), George Taylor Files Professor of Modern Languages. (1961)

John Clifford Holt, A.B. (Gustavus Adolphus), A.M. (Graduate Theological Union), Ph.D. (Chicago), Associate Professor of Religion. (1978)

Roger Howell, Jr., A.B. (Bowdoin), B.A., M.A., D.Phil. (Oxford), LL.D. (Nasson, Colby), L.H.D. (Maine), Litt.D. (Bowdoin), William R. Kenan, Jr., Professor of Humanities. (1964)

John LaFollette Howland, A.B. (Bowdoin), Ph.D. (Harvard), Josiah Little Professor of Natural Science and Professor of Biology and Biochemistry. (1963)

William Taylor Hughes, B.S., A.M. (Indiana), Ph.D. (Northwestern), Professor of Physics and Astronomy. (1966)

Marya Hunsinger, A.B. (Colorado College), A.M. (Wisconsin), Instructor in Romance Languages. (On leave of absence in the fall semester.) (1983)

Eugene Everette Huskey, Jr., A.B. (Vanderbilt), A.M. (University of Essex), Ph.D. (London School of Economics and Political Science), Assistant Professor of Government. (1983)

Arthur Mekeel Hussey II, B.S. (Pennsylvania State), Ph.D. (Illinois), Professor of Geology. (1961)

Nancy S. Johnson, A.B. (Kansas), Ph.D. (California, San Diego), Assistant Professor of Psychology. (1984)

Robert Wells Johnson, A.B. (Amherst), M.S., Ph.D. (Massachusetts Institute of Technology), Professor of Mathematics. (1964)

Kristine L. Jones, A.B. (Prescott), A.M., Ph.D. (Chicago), Assistant Professor of History. (1984)

Susan Ann Kaplan, A.B. (Lake Forest), A.M., Ph.D. (Bryn Mawr), Assistant Professor of Anthropology and Director of the Peary-MacMillan Arctic Museum and Arctic Studies Center. (1985)

John Michael Karl, A.B., A.M., Ph.D. (Harvard), Associate Professor of History. (On leave of absence in the fall semester.) (1968)

Barbara Jeanne Kaster, A.B. (Texas Western), M.Ed. (Texas, El Paso), Ph.D. (Texas, Austin), Harrison King McCann Professor of Oral Communication in the Department of English. (On leave of absence in the spring semester.) (1973)

David Israel Kertzer, A.B. (Brown), Ph.D. (Brandeis), Professor of Anthropology. (On leave of absence.) (1973)

Jane Elizabeth Knox, A.B. (Wheaton), A.M. (Michigan State), Ph.D. (Texas, Austin), Associate Professor of Russian. (On leave of absence in the fall semester.) (1976)

Elroy Osborne LaCasce, Jr., A.B. (Bowdoin), A.M. (Harvard), Ph.D. (Brown), Professor of Physics. (1947)

Edward Paul Laine, B.A. (Wesleyan), Ph.D. (Woods Hole, M.I.T.), Assistant Professor of Geology and Director of the Environmental Studies Program. (1985)

David B. LaPann, A.B. (Middlebury), A.M. (Biscayne), Coach in the Department of Athletics. (1984)

Mortimer Ferris LaPointe, B.S. (Trinity), M.A.L.S. (Wesleyan), Coach in the Department of Athletics. (1969)

Sally Smith LaPointe, B.S. Ed. (Southern Maine), Coach in the Department of Athletics. (1973)

James Spencer Lentz, A.B. (Gettysburg), A.M. (Columbia), Coach in the Department of Athletics. (1968)

Daniel Levine, A.B. (Antioch), A.M., Ph.D. (Northwestern), Thomas Brackett Reed Professor of History and Political Science. (1963)

Mike Linkovich, A.B. (Davis and Elkins), Trainer in the Department of Athletics. (1954)

Joseph David Litvak, A.B. (Wesleyan), M.Phil., Ph.D. (Yale), Assistant Professor of English. (On leave of absence in the spring semester.) (1982)

Burke O'Connor Long, A.B. (Randolph-Macon), B.D., A.M., Ph.D. (Yale), Professor of Religion. (1968)

Larry D. Lutchmansingh, A.B. (McGill), A.M. (Chicago), Ph.D. (Cornell), Associate Professor of Art. (1974)

Nancy Melissa Lutz, B.A., M.A., Ph.D. (Berkeley), Visiting Assistant Professor of Anthropology. (1986)

Janet Marie Martin, B.A. (Marquette), M.A., Ph.D. (Ohio State), Assistant Professor of Government. (1986)

Dana Walker Mayo, B.S. (Massachusetts Institute of Technology), Ph.D. (Indiana), Charles Weston Pickard Professor of Chemistry. (On leave of absence.) (1962)

Jeanne d'Arc Mayo, B.S., M.Ed. (Boston University), Associate Trainer and Physical Therapist. (1978)

James Wesley McCalla, B.M., A.B. (Kansas), M.M. (New England Conservatory), Ph.S. (California, Berkeley), Assistant Professor of Music. (1985)

David William McConnell, A.B. (Colorado College), A.M. (Wisconsin, Madison), Instructor in Government. (1982)

Craig Arnold McEwen, A.B. (Oberlin), A.M., Ph.D. (Harvard), Associate Professor of Sociology. (1975)

Charles Douglas McGee, B.S., A.M. (Northwestern), Ph.D. (Harvard), Professor of Philosophy. (1963)

John McKee, A.B. (Dartmouth), A.M. (Princeton), Lecturer in Art. (1969)

Sarah Francis McMahon, A.B. (Wellesley), Ph.D. (Brandeis), Assistant Professor of History. (On leave of absence in the spring semester.) (1982)

Terry A. Meagher, A.B. (Boston University), M.S. (Illinois State), Coach in the Department of Athletics. (1983)

Raymond H. Miller, A.B. (Indiana), A.M., Ph.D. (Harvard), Assistant Professor of Russian. (1983)

Richard Ernest Morgan, A.B. (Bowdoin), A.M., Ph.D. (Columbia), William Nelson Cromwell Professor of Constitutional and International Law and Government. (1969)

Atandra Mukhopadhyay, B.A., M.A. (Jadavpur), B.A. (Jawaharlal Nehru), M.A. (Indiana State), Visiting Instructor in Spanish. (1986)

Debra Zae Munn, B.M. (Roosevelt), M.M., D.M.A. (Illinois), Assistant Professor of Music. (1986)

Jeffrey Karl Nagle, B.A. (Earlham), Ph.D. (University of North Carolina), Associate Professor of Chemistry. (On leave of absence.) (1980)

Robert Raymond Nunn, A.B. (Rutgers), A.M. (Middlebury), Ph.D. (Columbia), Associate Professor of Romance Languages. (1959)

Paul Luther Nyhus, A.B. (Augsburg), S.T.B., Ph.D. (Harvard), Professor of History. (1966)

Clifton Cooper Olds, A.B. (Dartmouth), A.M., Ph.D. (Pennsylvania), Edith Cleaves Barry Professor of the History and Criticism of Art. (1982)

Michael King Ong, B.S. (University of the Philippines), A.M., M.S., Ph.D. (New York, Stony Brook), Assistant Professor of Mathematics. (1984)

David Sanborn Page, B.S. (Brown), Ph.D. (Purdue), Professor of Chemistry and Biochemistry. (1974)

Reba Neukom Page, A.B. (Washington University), M.L.A. (Johns Hopkins), Ph.D. (Wisconsin, Madison), Assistant Professor of Education. (On leave of absence.) (1985)

Barbara Rose Pavlock, B.A. (Barnard), M.A. (Yale), Ph.D. (Cornell), Visiting Assistant Professor of Classics. (1986)

Gayle Renee Pemberton, B.A. (Michigan), M.A., Ph.D. (Harvard), Visiting Associate Professor of English. (1986)

Carey Richard Phillips, B.S. (Oregon State), M.S. (California, Santa Barbara), Ph.D. (Wisconsin, Madison), Assistant Professor of Biology. (1985)

Edward Pols, A.B., A.M., Ph.D. (Harvard), Research Professor of Philosophy and the Humanities. (1949)

Christian Peter Potholm II, A.B. (Bowdoin), A.M., M.A.L.D., Ph.D. (Tufts), Professor of Government. (1970)

James Daniel Redwine, Jr., A.B. (Duke), A.M. (Columbia), Ph.D. (Princeton), Edward Little Professor of the English Language and Literature. (On leave of absence in the spring semester.) (1963)

Edward Thomas Reid, Coach in the Department of Athletics. (1969)

Marilyn Reizbaum, A.B. (Queens College), M. Litt. (University of Edinburgh), Assistant Professor of English. (1984)

John Cornelius Rensenbrink, A.B. (Calvin), A.M. (Michigan), Ph.D. (Chicago), Professor of Government. (1961)

Robin Francis Rhodes, A.B., Ph.D. (North Carolina), Assistant Professor of Archaeology in the Department of Classics. (1985)

Rosemary A. Roberts, B.A. (University of Reading), M. Sc., Ph.D. (University of Waterloo), Assistant Professor of Mathematics. (1984)

Guenter Herbert Rose, B.S. (Tufts), M.S. (Brown), Ph.D. (California, Los Angeles), Associate Professor of Psychology. (1976)

Daniel Walter Rossides, A.B., Ph.D. (Columbia), Professor of Sociology. (1968)

Lynn Margaret Ruddy, B.S. (Wisconsin, Oshkosh), Coach in the Department of Athletics. (1976)

Abram Raymond Rutan, A.B. (Bowdoin), M.F.A. (Yale), Director of Theater in the Department of English. (1955)

Paul Eugene Schaffner, A.B. (Oberlin), Ph.D. (Cornell), Associate Professor of Psychology. (1977)

Elliott Shelling Schwartz, A.B., A.M., Ed.D. (Columbia), Professor of Music. (On leave of absence in the fall semester.) (1964)

Carl Thomas Settlemire, B.S., M.S. (Ohio State), Ph.D. (North Carolina State), Associate Professor of Biology and Chemistry. (1969)

Harvey Paul Shapiro, B.S. (Connecticut), M.Ed. (Springfield), Coach in the Department of Athletics. (1983)

Peter W. Shaw, A.B. (Bowdoin), M.A. (New York), Visiting Instructor in History. (1986)

William Davis Shipman, A.B. (University of Washington), A.M. (California, Berkeley), Ph.D. (Columbia), Adams-Catlin Professor of Economics. (1957)

Kenneth Silvestro, B.S.E.E., M.S.E.E. (Rhode Island), Ph.D. (Connecticut), Assistant Professor of Computer Science and Information Studies. (1985)

Melinda Yowell Small, B.S., A.M. (St. Lawrence), Ph.D. (Iowa), Associate Professor of Psychology. (1972)

G. E. Kidder Smith, Jr., A.B. (Princeton), Ph.D. (California, Berkeley), Assistant Professor of History. (On leave of absence in the fall semester.) (1981)

Johanna Mary Smith, A.B. (San Francisco), A.M., Ph.D. (Claremont), Visiting Assistant Professor of English. (1986)

Philip Hilton Soule, A.B. (Maine), Coach in the Department of Athletics. (1967)

Allen Lawrence Springer, A.B. (Amherst), A.M., M.A.L.D., Ph.D. (Tufts), Associate Professor of Government. (1976)

Randolph Stakeman, A.B. (Wesleyan), A.M., Ph.D. (Stanford), Assistant Professor of History. (1978)

William Lee Steinhart, A.B. (Pennsylvania), Ph.D. (Johns Hopkins), Associate Professor of Biology. (1975)

Françoise Dupuy Sullivan, Maîtrise (Université de Bordeaux), A.M. (Washington, Seattle), Ph.D. (California, Irvine), Assistant Professor of Romance Languages. (1985)

Dale A. Syphers, B.S., M.Sc. (Massachusetts), Ph.D. (Brown), Assistant Professor of Physics. (1986)

Clifford Ray Thompson, Jr., A.B., A.M., Ph.D. (Harvard), Professor of Romance Languages. (On leave of absence in the spring semester.) (1961)

Peter Keim Trumper, A.B. (St. Olaf), Ph.D. (Minnesota), Assistant Professor of Chemistry and Dana Faculty Fellow. (1985)

James Henry Turner, A.B. (Bowdoin), B.S., M.S., Ph.D. (Massachusetts Institute of Technology), Associate Professor of Physics. (1964)

John Harold Turner, M.A. (St. Andrews, Scotland), A.M. (Indiana), Ph.D. (Harvard), Professor of Romance Languages. (On leave of absence.) (1971)

David Jeremiah Vail, A.B. (Princeton), A.M., M.Phil., Ph.D. (Yale), Professor of Economics. (On leave of absence in the fall semester.) (1970)

Howard S. Vandersea, A.B. (Bates), M.Ed. (Boston University), Coach in the Department of Athletics. (1984)

William Chace VanderWolk, A.B. (North Carolina), A.M. (Middlebury), Ph.D. (North Carolina), Assistant Professor of Romance Languages. (1984)

David Charles Vella, B.A. (American International College), Ph.D. (Virginia), Visiting Assistant Professor of Mathematics. (1986)

James Edward Ward **III**, A.B. (Vanderbilt), A.M., Ph.D. (Virginia), Professor of Mathematics. (1968)

Sidney John **Watson**, B.S. (Northeastern), Director of Athletics. (1958)

William Collins **Watterson**, A.B. (Kenyon), Ph.D. (Brown), Associate Professor of English. (1976)

Susan Elizabeth **Wegner**, A.B. (Wisconsin, Madison), A.M., Ph.D. (Bryn Mawr), Assistant Professor of Art History. (1980)

Eric **Werner**, B.S., Ph.D. (Wisconsin, Madison), Assistant Professor of Computer Science and Information Studies and Dana Faculty Fellow. (1985)

Mark Christian **Wethli**, B.F.A., M.F.A. (University of Miami), Associate Professor of Art. (1985)

Nathaniel Thoreau **Wheelwright**, B.S. (Yale), Ph.D. (Washington), Assistant Professor of Biology. (1986)

William Bolling **Whiteside**, A.B. (Amherst), A.M., Ph.D. (Harvard), Frank Munsey Professor of History. (1953)

Frank Harold **Wilson, Jr.**, A.B. (Howard), A.M. (Rutgers), Ph.D. (Michigan), Assistant Professor of Sociology. (1985)

Andrew M. **Wolfe**, B.A.S., B.S.E. (Pennsylvania), A.M., Ph.D. (Wisconsin), Assistant Professor of Economics. (1983)

Jay A. **Wood**, A.B. (Notre Dame), M.A., Ph.D. (Berkeley), Assistant Professor of Mathematics. (1986)

COMMITTEES OF THE FACULTY

Lucie G. Teegarden, *Faculty Clerk*

Administrative: The President, *Chairman;* the Dean of the College, the Dean of Students, the College Physician, Ms. Connelly, Messrs. Gottschalk, Settlemire, and Wilson. Undergraduates: Anne A. Gannon '89, Mitchell A. Price '89, and Brandon S. Sweeney '89.

Admissions: Mr. Barker, *Chairman;* the Dean of the College, the Director of Admissions, Mr. Cullen, Ms. Floge, Messrs. Griffin and Holt. Undergraduates: Gerald C. Chertavian '87, Monique daSilva '89, and Douglass M. H. Hatcher '87. Alternate: Paul A. Stein '89.

Afro-American Studies: Mr. Wolfe, *Chairman;* the Dean of Students, the Director of Afro-American Studies, Messrs. Fisk, Levine, McConnell, Rose, and Wilson. Undergraduates: Luis E. Clemens '89 and Won Sun Sin '89, and three undergraduates to be named.

Athletics: Mr. Ambrose, *Chairman;* the Dean of the College, the Director of Athletics, Ms. Kaster, Messrs. VanderWolk and Werner. Undergraduates: Martha H. Gourdeau '87, Christopher P. Kiritsky '87, and Jeffrey A. LaPlante '87.

Committee on Committees: Mr. Rensenbrink (1988), *Chairman;* the Dean of the Faculty, Ms. Cafferty (1989), Ms. Dickinson (1988), Mr. Huskey (1988) (to be replaced by election in September due to election to the Faculty Affairs Committee), Ms. McMahon (1987), and Mr. Steinhart (1987).

Computing Center: Mr. Fisk, *Chairman;* the Dean of the Faculty, the Chairman of Computer Science, Mr. Curtis, Ms. McMahon (1st sem.), Ms. Roberts, Mr. Smith (2nd sem.) and Mr. Trumper. Undergraduates: Andrew H. Palmer '88 and Scott B. Townsend '89.

Curriculum and Educational Policy: The President, *Chairman;* the Dean of the College, the Dean of the Faculty, Mr. Springer, *Secretary;* Messrs. Butcher, Johnson, Hodge, Stakeman, and Ms. Wegner. Undergraduates: Nicholas M. Grumbach '88, Timothy D. Leland '89. Alternate: Luis E. Clemens '89.

Environmental Studies: Mr. McKee, *Chairman;* the Director of Environmental Studies, Ms. Coleman, Ms. Dickinson, Messrs. Ong, Rensenbrink, and James Turner. Undergraduates: Julie E. Cohn '89, Lisa M. Naglieri '87, and George R. Pess '87.

Faculty Affairs: Mr. Howland (1988), *Chairman;* the Dean of the Faculty, Messrs. Burroughs (1988), Christensen (1987), Huskey (1987), Olds (1987), Ms. Reizbaum (1988), and Mr. Ward (1989).

Faculty Research: The President, *Chairman;* the Dean of the Faculty, Ms. Coleman (Course Development), Messrs. Goldstein (Research Fund), Levine (Surdna and Undergraduate Fellowships), Page (Development Fund), and Wethli (Koelln and Langbein Fellowships).

Grievance (Sex): Mr. Rensenbrink, *Chairman;* Mr. Corish, Ms. Dean, Ms. Held, and Mr. Settlemire. Alternates: Ms. Dickinson and Mr. Wolfe.

Human and Animal Research: Mr. Corish, *Chairman;* the Dean of the Faculty, Ms. Bell, Messrs. Morgan, Phillips, Whiteside, and R. S. Youmans, D.V.M.

Lectures and Concerts: Mr. Watterson, *Chairman;* the Dean of the College, Ms. Jones, Messrs. Long, Rutan, Steinhart, and Ms. Watson. Undergraduates: Joseph J. Gulino '89 and Won Sun Sin '89. Alternate: Michael P. Smith '89.

Library: Mr. Nyhus, *Chairman;* the Librarian, Ms. Dean, Messrs. Geoghegan, Greenlee, and Lutchmansingh. Undergraduates: Kimberlee J. Grillo '89 and Elizabeth A. Schwartz '89.

Recording: The Dean of the College, *Chairman;* the Dean of Students, the Registrar, Messrs. Cerf, Freeman, Ms. Friedman, Mr. Rose. Undergraduates: Kenneth R. Branton, Jr. '87 and Evan W. Morris III '87. Alternate: Mark P. Tellini '87.

Scholarship: The Dean of the College, *Chairman;* the Director of Student Aid, Messrs. Brogyanyi, DeCoster, Ms. Johnson, Messrs. Howell and Phillips.

Studies in Education: Mr. Miller, *Chairman;* Messrs. Nunn, Ong, Ms. Page, and Mr. Rhodes.

Student Activities Fee: Mr. Donahue, *Chairman 1st sem.;* Mr. Karl, *Chairman 2nd sem.;* William T. Evans '87, *Student Chairman;* the Assistant Dean of Students, Messrs. Alvarez and Coursen. Undergraduates: James N. Boudreau '87, Elizabeth M. Calciano '88, Ramsey D. Gifford '89, and Cynthia R. Heller '88.

Student Awards: Mr. LaCasce, *Chairman;* Ms. Hunsinger, Ms. Kaplan, Messrs. McCalla, McGee, and Potholm.

Student Life: The Dean of Students, *Chairman;* the Director of the Moulton Union, the Assistant Dean of Students, the College Counselor, Ms. Cafferty, Messrs. Howell, Meagher, Schaffner, and Ms. Sullivan. Undergraduates: Lindsey R. Baden '87, Kenneth R. Branton, Jr. '87, Lynn L. Levasseur '88, and Erica R. Lowry '89. Alternates: Nicholas M. Grumbach '88, Jonathan D. Sharkey '87, and Paul A. Stein '89.

Upward Bound: Mr. Hussey, *Chairman;* the Dean of the College, the Director of Upward Bound, Messrs. Hughes, McKee, Robinson, Rossides, and Ms. Ruddy. Undergraduates: Pamela V. Butler '89, Elizabeth A. Schwartz '89.

Adjunct Faculty

Joseph T. Bennett, B.S. (Michigan State), M.S., Ph.D. (Washington), Research Associate in the Department of Chemistry.

Rene L. Bernier, B.S. (Maine), Teaching Fellow in Chemistry.

Pamela Jean Bryer, B.S., M.S. (Rensselaer Polytechnic Institute), Teaching Fellow in Biology.

Eva Wagner Cahill, A.B. (Mount Holyoke). Teaching Fellow in Biology.

Marie-Pierre Caquot, Teaching Fellow in French.

Chen Yixien (Beijing Institute of Foreign Languages), Visiting Lecturer in Chinese.

Orlando E. Delogu, B.S. (Utah), M.S., J.D. (Wisconsin), Visiting Professor of Environmental Studies. (Spring 1987)

Paulette Messier Fickett, A.B. (Maine, Presque Isle), Teaching Fellow in Chemistry.

Judith Cooley Foster, A.B. (Brown), A.M. (Rhode Island), Teaching Fellow in Chemistry and Director of Laboratories.

Alan Garfield, A.B. (New Hampshire), Teaching Fellow in Biology.

Edward Smith Gilfillan III, A.B. (Yale), M.Sc., Ph.D. (British Columbia), Lecturer in Environmental Studies and Adjunct Professor of Chemistry.

Christopher C. Glass, A.B. (Haverford), M.Arch. (Yale), Visiting Lecturer in Art. (Spring 1987)

Lauren B. Glass, B.S. (Trinity), Teaching Fellow in Chemistry.

Janet Ruth Hotham, B.S. (Merrimack), Research Teaching Fellow in Chemistry.

George Steven Isaacson, A.B. (Bowdoin), J.D. (Pennsylvania), Visiting Lecturer in Education. (Fall 1986)

Rolf Kanert, Teaching Fellow in German.

Kenneth Adell Lewallen, B.S. (Texas A. and M.), Ph.D. (Kansas State), Lecturer in History. (Fall 1986)

Flora H. Lutz, A.B., A.M. (Maine), J.D. (Boston University), Visiting Lecturer in Classics.

Gerald Frederick McGee, B.M. (Westminster), M.M. (Union Theological Seminary), Director of the Chorale.

Rosa Pellegrini, Diploma Magistrale (Istituto Magistrate "Imbriani" Avellino), Lecturer in Italian.

Carmine Pepe, B.S. (New York), M.M. (Indiana), Visiting Lecturer in Music.

David L. Roberts, A.B. (Bowdoin), Ph.D. (Case Western Reserve), Teaching Associate in Physics.

Michael Paul Roderick, A.B. (Maine), Theater Technician.

Leah G. Shulsky, M.A. (Moscow Pedagogical Institute), Teaching Fellow in Russian.

Donald O. Stover, B.A. (Haverford), Ph.D. (Syracuse), Visiting Lecturer in Psychology.

Juan A. Suarez, Teaching Fellow in Spanish.

Isabelle Valeix, Teaching Fellow in French.

Wesley Johnson VanSciver, B.S. (Massachusetts Institute of Technology), Ph.D. (Stanford), Visiting Professor of Physics. (Spring 1987)

Mary-Agnes Wine, A.B., A.M. (Mount Holyoke), Teaching Fellow in Biology. (Spring 1987)

Officers of Administration

GENERAL ADMINISTRATION

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), President.

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Alfred Herman Fuchs, A.B. (Rutgers), A.M. (Ohio), Ph.D. (Ohio State), Dean of the Faculty.

Craig Arnold McEwen, A.B. (Oberlin), A.M., Ph.D. (Harvard), Assistant Dean of the Faculty.

John Loomis Heyl, A.B. (Trinity), Vice President for Development.

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Lisa Anne Barresi, A.B. (Bowdoin), Assistant Dean of Students.

Janet B. Smith, A.B. (Wells), A.M., M.Lib.Stud. (Boston University), Assistant to the President, Affirmative Action Officer.

William J. Fruth, A.A. (East Los Angeles), B.S. (San Diego State), M.A. (West Virginia), Student Activities Coordinator.

Jayne Helen Rowe, A.B. (Bowdoin), Deans' Office Fellow.

ADMISSIONS OFFICE

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Brendan Charles McNally, A.B. (Bowdoin), Assistant Director.

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Melissa Ann Walters, A.B. (Bowdoin), Admissions Counselor.

ATHLETICS

Sidney John Watson, B.S. (Northeastern), Director of Athletics.

AUDIOVISUAL SERVICES

James Alan Clayman, Technician.

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Sally Anne Adams, B.A. (Montana), Assistant to the Director.

BRECKINRIDGE PUBLIC AFFAIRS CENTER

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Pauline Paquet Farr, Director of Computer Services—Accounting.

James Packard Granger, B.S. (Boston University), C.P.A., Controller.

Thomas Joseph Mallon, Accounting Office Manager.

Betty Mathieson Massé, Assistant to the Business Manager.

Barbara MacPhee Wyman, Assistant to the Controller.

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Susan Deland Livesay, A.B. (Smith), Career Counselor.

Kristen Marie Ludgate, A.B. (Bowdoin), Job Locater and Development Fellow.

Ann Semansco Pierson, A.B. (Bowdoin), Coordinator for Educational Programs and Placement and Volunteer Service Programs.

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Laurent Conrad Pinette, Assistant to the Director and Executive Chef.

Ezra Allen Stevens, Purchasing Agent.

CHEMISTRY LABORATORIES

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DUDLEY COE HEALTH CENTER

Roy Edward Weymouth, Jr., A.B. (Bowdoin), M.D. (Tufts), College Physician.

Geoffrey Beckett, B.S. (Western Michigan), Physician's Assistant.

COMPUTING CENTER

Myron Whipple Curtis, A.B. (Bowdoin), A.M. (California, Los Angeles), Director.

John D. Balling, A.B. (Northwestern), A.M., Ph.D. (Massachusetts), Academic User Services Coordinator.

Mark Ingwald Nelsen, A.B. (California, Berkeley), Associate Director.

Carol Arlita Flewelling O'Donnell, A.B. (Maine), Administrative Applications Coordinator.

Stephen G. Smith, A.B. (Colby), M.B.A. (Maine), Administrative Applications Coordinator.

Amy Lisette Thompson, A.B. (Bowdoin), Computing Center Fellow.

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Michaelanne Rosenzweig, A.B. (Mount Holyoke), M.S.W. (Simmons), College Counselor.

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Campbell Cary, A.B. (Bowdoin), Special Assistant to the Vice President.

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Albert Richard Smith II, A.B. (Trinity), Director of Annual and Reunion Giving.

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Jeffrey Paul Winey, A.B. (Bowdoin), Development Office Fellow.

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Elaine Mae Tietjen, A.B. (Wesleyan), Program and Course Assistant.

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Arthur Monke, A.B. (Gustavus Adolphus), M.S. in L.S. (Columbia), Librarian.

John Bright Ladley, B.S. (Pittsburgh), M.L.S. (Carnegie Institute of Technology), Reference Librarian.

Priscilla Hubon McCarty, A.B. (Brown), M.L.S. (Maine), Cataloger.

Judith Reid Montgomery, A.B. (Valparaiso), M.L.S. (Kent State), Assistant Librarian.

Shirley A. Reuter, A.B. (New Hampshire), M.L.S. (Syracuse), Acquisitions Librarian.

Edwin Joseph Saeger, A.B. (St. Joseph's College, Philadelphia), A.M. (Villanova), M.L.S. (Drexel), Cataloger.

Donna Glee Sciascia, A.B. (Emporia), M.A. in L.S. (Denver), Head, Catalog Department.

Elda Gallison Takagi, B.S., A.M. (Maine), A.M., M.A. in L.S. (Michigan), Documents Librarian.

Lynda Kresge Willis, B.A., M.A. (Tufts), M.L.S. (Rhode Island), Cataloger.

MOULTON UNION

Harry Knight Warren, A.B. (Pennsylvania), Director.

Robert Thomas Santry (Southern Maine), Bookstore Manager.

MUSEUM OF ART

Katharine Johnson Watson, A.B. (Duke), A.M., Ph.D. (Pennsylvania), Director.

John William Coffey II, A.B. (North Carolina, Chapel Hill), A.M. (Williams), Curator of Collections.

Henrietta McBee Tye, B.S. (Simmons), M.Ed. (Wheelock), A.M. (Syracuse), Ph.D. (North Carolina, Chapel Hill), Registrar.

Roxlyn Towle Yanok, Administrative Assistant to the Director.

MUSIC

Donald Pike Marston, Administrative Assistant.

PHYSICAL PLANT

David Newton Barbour, B.S. (Maine), M.B.A. (Southern Maine), Director.

John Stanley DeWitt, Superintendent of Mechanical Services.

Leo Paquin, Superintendent of Custodial Services.

George Paton, B.S. (Massachusetts, Amherst), Assistant Director.

Theodore de la Rue, Assistant to the Superintendent of Custodial Services.

Philip A. Sargent, B.S. (Maine), M.F. (Yale), College Forester.

Howard Ewing Whalin, Superintendent of Brunswick Apartments.

Robert Edward Wilson, Superintendent of Buildings and Grounds.

PEARY-MACMILLAN ARCTIC MUSEUM AND ARCTIC STUDIES CENTER

Susan Ann Kaplan, A.B. (Lake Forest), A.M., Ph.D. (Bryn Mawr), Director.

Miriam Look MacMillan, Sc.D. (Bowdoin), Associate Curator.

PICKARD THEATER

A. Raymond Rutan, A.B. (Bowdoin), M.F.A. (Yale), Director.

Michael Paul Roderick, A.B. (Maine), Theater Technician.

PUBLIC RELATIONS AND PUBLICATIONS

Richard Alan Mersereau, A.B. (Bowdoin), M.A.T. (Wesleyan), Director.

Rachel Davenport Dutch, A.B. (Maine), Assistant Director.

Lucie Giegengack Teegarden, A.B. (College of New Rochelle), A.M. (Yale), Associate Director.

Mark Franklin Wanner, A.B. (Bowdoin), Public Relations Fellow.

Harry Randolph Wilson III, A.B. (Wesleyan), A.M. (Stanford), News Director.

SECURITY

Lawrence Winters Joy, Director of Campus Security.

SPECIAL AND SUMMER PROGRAMS

Edmund A. Peratta, A.B. (Bowdoin), A.M. (New Hampshire), Director.

STUDENT AID OFFICE

Walter Henry Moulton, A.B. (Bowdoin), Director.

Gary Paul Allen, A.B. (Bowdoin), Student Aid Fellow.

UPWARD BOUND

Doris Charrier Vladimiroff, A.B. (Duke), A.M. (Middlebury), Project Director.

Ludger Hilaire Duplessis, A.B. (Bowdoin), Assistant Director.

Scott William Bradley, A.B. (Maine), Counselor.

Campus and Buildings

Bowdoin is located in Brunswick, Maine, a town of approximately 18,000 population, first settled in 1628, on the banks of the Androscoggin River, a few miles from the shores of Casco Bay. The campus, originally a sandy plain covered with blueberries and pines, is a tract of 110 acres containing more than fifty buildings and several playing fields.

Massachusetts Hall is the oldest building on the campus, having been completed in 1802. For several years it housed the students, and all classes were held there. Now used for faculty offices, the building was designated a Registered Historical Landmark in 1971.

The work of the College has its heart and center in Nathaniel Hawthorne-Henry Wadsworth Longfellow Library, which contains the accumulations of over a century and a half. The nucleus of its 660,000 volumes is the collection of books and pamphlets bequeathed by James Bowdoin. These "Bowdoin Books," rich in French literature, American history, and mineralogy, were supplemented by the same generous benefactor's gift of an art collection containing many paintings of old and modern masters. Among the paintings are the portraits of Thomas Jefferson and James Madison by Gilbert Stuart, and a notable collection of portraits by the distinguished colonial artist Robert Feke.

Classes are held in Adams, Banister, Cleaveland, Gibson, Hubbard, and Sills halls, the Afro-American Center, Coles Tower, Searles Science Building, Smith Auditorium, and the Visual Arts Center. When students are not engaged in academic work, they have at their disposal many well-equipped recreational facilities. These include the Dayton Arena, Curtis Pool, Hyde Athletic Building, Morrell Gymnasium, Moulton Union, Pickard Field House, Sargent Gymnasium, and some seventy-five acres of playing fields. Another valuable adjunct for the health of the student is the Dudley Coe Health Center.

COLLEGE BUILDINGS

Seth Adams Hall was designed by Francis H. Fassett and erected in 1860-1861 and named in honor of Seth Adams, of Boston, who contributed liberally toward its construction. From 1862 until 1921 it housed the classrooms of the Medical School of Maine. It now houses the Smyth Mathematical Library, named in memory of William Smyth, of the Class of 1825, who was professor of mathematics from 1828 to 1868. The building also contains classrooms, lecture rooms, and the offices of the Department of Mathematics. It stands west of the Presidents' Gateway.

Appleton Hall (1843), designed and built by Samuel Melcher and Sons and

named in memory of the second president of the College; **Coleman Hall** (1958), designed by McKim, Mead & White and named in honor of the family of the donor, Jane Coleman Pickard (Mrs. Frederick W. Pickard); **Hyde Hall** (1917), designed by Allen and Collins and named in memory of the seventh president of the College; **Maine Hall** (1808), designed and built by Anthony G. Raymond, known originally as "the College" and named later to commemorate the admission of Maine to the Union; **Moore Hall** (1941), designed by McKim, Mead & White and named in honor of his father by the donor, Hoyt Augustus Moore, LL.D., of the Class of 1895; and **Winthrop Hall** (1822), designed and built by Samuel Melcher III and named in memory of Governor John Winthrop of the Massachusetts Bay Colony, are the six campus dormitories. In 1964-1966 the interiors of Appleton, Maine, and Winthrop were completely renovated.

Ashby House, located on Maine Street across from Hawthorne-Longfellow Library, was given by the estate of the Reverend Thompson E. Ashby, for many years minister of the First Parish Church. An eighteenth-century frame house, it has been used over the years as a faculty residence, eating hall, and student dormitory. It was renovated in 1974 and currently houses the Department of Sociology and Anthropology.

Baxter House, at 10 College Street, was purchased in 1971 and is used as a student residence. For nearly twenty years it was the chapter house of Delta Psi of Sigma Nu, which established a scholarship fund at the College with the proceeds from the sale. Named for the Baxter family in recognition of its many contributions to Bowdoin and the State of Maine, it was designed by Chapman and Frazer and built by Hartley C. Baxter, of the Class of 1878, one of five Baxters to serve on the Governing Boards and stepbrother of Percival J. Baxter, of the Class of 1898, governor of Maine from 1921 to 1925.

Burnett House, 232 Maine Street, is a residence for students which was acquired in 1972. From 1965 to 1970 it was the home of Phi Delta Psi Fraternity. For many years it was the home of Professor and Mrs. Charles T. Burnett. Professor Burnett, chairman of the Department of Psychology, was an active member of the faculty for forty-two years before his retirement in 1944. The house was built in the 1860s by a retired seafarer and purchased by the Burnetts in 1920.

Chamberlain Hall, designed by Hugh Stubbins and constructed in 1964, was named in memory of General Joshua Lawrence Chamberlain, LL.D., of the Class of 1852, Civil War hero, governor of Maine, and president of Bowdoin from 1871 to 1883. It houses the Admissions Office.

The Chapel, a Romanesque church of undressed granite designed by Richard Upjohn, was built during the decade from 1845 to 1855 from funds received from the Bowdoin estate. The façade is distinguished by twin towers

and spires which rise to the height of 120 feet. The interior resembles the plan of English college chapels, with a broad central aisle from either side of which rise the ranges of seats. The lofty walls are decorated with twelve large paintings. The Chapel stands as a monument to President Leonard Woods, fourth president of the College, under whose personal direction it was erected. The flags are of the original thirteen colonies plus Maine, which was a part of Massachusetts at the time of the founding of the College in 1794. A set of eleven chimes, the gift of William Martin Payson, of the Class of 1874, was installed in the southwest tower in 1923. In the Chapel is an organ given in 1927 by Cyrus H. K. Curtis, LL.D.

That portion of the building which formerly housed the reading rooms and stack space of the college library was named **Banister Hall** in 1850 in recognition of the gifts of the Honorable William Banister. It contains the offices, classrooms, and laboratories of the Department of Psychology. The human psychobiology laboratory is named in honor of psychologist Harry Helson, Ph.D., of the Class of 1921.

Chase Barn Chamber, named in memory of Stanley Perkins Chase, Ph.D., of the Class of 1905, Henry Leland Chapman Professor of English Literature from 1925 to 1951, and Mrs. Chase, is a handsome room located in the ell of the **Johnson House.** Designed by Felix Burton, of the Class of 1907, in the Elizabethan style, the chamber is heavily timbered, contains a small stage, an impressive fireplace, and houses many of the books from the Chase library. It is used for small classes, seminars, and conferences.

Parker Cleaveland Hall, designed by McKim, Mead & White, was dedicated in 1952. The building was made possible by donors to the Sesquicentennial Fund. It houses the Department of Chemistry and bears the name of Parker Cleaveland, who taught chemistry and mineralogy at Bowdoin from 1805 to 1858 and was a pioneer in geological studies. Special gifts provided the Kresge Laboratory of Physical Chemistry, the Wentworth Laboratory of Analytical Chemistry, the 1927 Room (a private laboratory), the Adams Lecture Room, the Burnett Room (a seminar room), and the Dana Laboratory of Organic Chemistry.

Dudley Coe Health Center is a three-story brick building erected in 1916-1917. It was designed by Allen and Collens and given by Thomas Upham Coe, M.D., of the Class of 1857, in memory of his son, and stands in the pines to the south of the Hyde Athletic Building. In 1957 it was enlarged through a gift by Agnes M. Shumway, A.M. (Mrs. Sherman N. Shumway). In 1962 it was licensed by the state as a private general hospital. An addition was built in 1974 to provide additional patient care area. The second floor houses the offices of the Counseling Service; the third floor the Gynecological Services.

Coles Tower, designed by Hugh Stubbins, was completed in 1964 and served for several years as the residential unit of the Senior Center. When the Senior Year Program was ended in 1979, the sixteen-story tower was named in honor of James Stacy Coles, Ph.D., D.Sc., LL.D., Sc.D., ninth president of the College and the program's chief proponent. The building includes living and study quarters, seminar and conference rooms, lounges, and accommodations for official guests of the College. The first floor is dedicated to the memory and honor of the late Henry Quinby Hawes, A.M., of the Class of 1910, and Mrs. Hawes.

Copeland House, at 88 Federal Street, was acquired in 1972. A residence for students, it was formerly the home of Manton Copeland, Ph.D., who taught biology at the College from 1908 until 1947 and was Josiah Little Professor of Natural Science Emeritus at the time of his death in 1971.

Marshall Perley Cram Alumni House, at 83 Federal Street, was bequeathed to the College in 1933 on the death of Professor Marshall Perley Cram, Ph.D., of the Class of 1904. Renovated in 1962 and maintained by the College, it is the center of alumni activities at Bowdoin and contains lounges, rest rooms, and other facilities for the use of visiting alumni and their families and guests. It also houses the alumni relations office and the offices of the *Bowdoin Alumni Magazine.* The Ladies' Lounge, located on the second floor, was presented by the Society of Bowdoin Women in 1965. Displayed on the first floor is a collection of polar bears done in crystal, porcelain, and other media that was the gift of the widow of Daniel L. Dayton '49 in 1974.

Curtis Swimming Pool was given to the College in 1927 by Cyrus H. K. Curtis, LL.D. Designed by McKim, Mead & White, the pool is housed in a separate wing attached to the Sargent Gymnasium. It measures thirty by seventy-five feet. The Curtis Pool Building also houses the Environmental Studies Center.

Dayton Arena, designed by Barr, Gleason, and Barr and named in memory of Daniel L. Dayton, Jr., of the Class of 1949, was built in 1956 with contributions from alumni, students, and friends. It contains seats for 2,400 spectators, a regulation ice-hockey rink with a refrigerated surface 200 feet long by 85 feet wide, locker rooms, and a snack bar. During 1972 and 1973 numerous improvements were made, including the installation of brighter lights and additional ice-making equipment, which enables the arena to be operated year-around. It is the site of intercollegiate and intramural hockey contests, as well as recreational skating.

85 Federal Street, the former home of Bowdoin's presidents, was built in 1860 by Captain Francis C. Jordan and originally stood on the lot at 77 Federal Street. It was purchased by the College in 1867 and was occupied by

President Harris until 1871. The house was purchased by Peleg W. Chandler, who had it moved in 1874 to its present location at the corner of Federal and Bath streets. At a later date the College reacquired the house, and shortly after President Hyde assumed office in 1885, it became his official residence. The ballroom, designed by Felix Arnold Burton, was added in 1926. It now houses the offices of the vice president for development and his staff and the alumni fund office.

Getchell House, located at 5 Bath Street, is diagonally opposite Adams Hall. It was given in 1955 by Miss Gertrude Getchell, of Brunswick, and completely refurbished in 1956. It houses the public relations and publications offices.

The Harvey Dow Gibson Hall of Music, named for Harvey Dow Gibson, LL.D., of the Class of 1902, was dedicated in 1954. Its construction was made possible by funds donated by Mrs. Harvey Dow Gibson; by Mrs. Gibson's daughter, Mrs. Whitney Bourne Choate; by the Manufacturers Trust Company of New York; and by several friends of Mr. Gibson. Designed by McKim, Mead & White, the building contains class, rehearsal, and practice rooms, a recording room, several rooms for listening to records, offices, and a music library. A recital hall was completed in 1978. The common room is richly paneled in carved walnut from the music salon designed in 1724 by Jean Lassurance (1695-1755) for the Hôtel de Sens in Paris.

Ham House, at 3 Bath Street, was for many years the residence of Roscoe J. Ham, L.H.D., George Taylor Files Professor of Modern Languages from 1921 to 1945. Acquired in 1954, it houses the offices of Bowdoin Upward Bound.

Harpswell Street Apartments, adjacent to Pickard Field, and **Pine Street Apartments,** across from Whittier Field, were designed by Design Five Maine, Inc., and opened in the fall of 1973. There are two buildings of contemporary design at each location, and each of the buildings contains six apartments. The apartments, which accommodate up to ninety-six students, were built to meet the need for additional housing and to provide an alternative to living in a conventional dormitory.

Nathaniel Hawthorne-Henry Wadsworth Longfellow Library, designed by Walker O. Cain and Associates, of New York, was built in 1964-1965 from funds contributed during the Capital Campaign. It was named after two of Bowdoin's literary giants, both members of the Class of 1825. It houses the principal portions of the library of the College and—in its western end, named **Hawthorne-Longfellow Hall**—most of the general administrative offices of the College. In 1984, the Hubbard Hall-library connector was completed. This area containing the government documents is named in memory of John C. Donovan, the DeAlva Stanwood Alexander Professor of Government and member of the faculty from 1965 to 1984. Renovations to Hubbard's book

stack area, additional open-shelf space, and increased study areas were also finished. Also included in the project was climate control for a remodeled and enlarged Special Collections Suite.

Hubbard Grandstand was given in 1904 by General Thomas H. Hubbard, LL.D., of the Class of 1857 and designed by Henry Vaughan. It is situated on **Whittier Field,** a tract of five acres, named in honor of Frank Nathaniel Whittier, M.D., of the Class of 1885, for many years director of the gymnasium, who was largely instrumental in its acquisition for varsity football and track in 1896. An electrically operated scoreboard, the gift of the widows of Harvey Dow Gibson, LL.D., of the Class of 1902, and Adriel Ulmer Bird, A.M., of the Class of 1916, was erected in 1960. Surrounding the field is the **John Joseph Magee Track,** an Olympic regulation all-weather track given by alumni and friends in memory of Mr. Magee, coach, trainer, and director of track and field athletics from 1913 to 1955.

Hubbard Hall, designed by Henry Vaughan and erected in 1902-1903, was the gift of General Hubbard and his wife, Sibyl Fahnestock Hubbard. For over sixty years, until the fall of 1965, it was the College library. It is now used for faculty offices, examination rooms, and the Department of Geology. Located in the basement is the Computing Center, which contains a PDP-10 time-sharing system. The Peary-MacMillan Arctic Museum is located on the first floor, and the Susan Dwight Bliss Room for rare books and bindings remains on the second floor. During the spring of 1977 the large west wing of the second floor was restored to its original condition and now provides additional study area for students.

Johnson House, designed by Gervase Wheeler and named in memory of Henry Johnson, Ph.D., Litt.D., of the Class of 1874, a distinguished member of the Bowdoin faculty from 1877 to 1918, and Mrs. Johnson, is located at the corner of Maine and Boody streets across from the southwestern entrance to the campus. Bequeathed to the College in 1957, it is used as the home of the Dean of the College. The house was designated a Registered Historical Landmark in 1975.

Little-Mitchell House, at 6-8 College Street, houses the John Brown Russwurm Afro-American Center. The Mitchell House was designed and built by Samuel Melcher III and named in honor of Wilmot Brookings Mitchell, L.H.D., of the Class of 1890, Edward Little Professor of Rhetoric and Oratory from 1893 to 1939. It was given by Professor Mitchell in 1961. The Little House, the 8 College Street side of the connected buildings, was acquired in 1962.

Little-Mitchell House was opened as the Afro-American Center in 1970 and rededicated as the John Brown Russwurm Afro-American Center in 1979 in honor of John Brown Russwurm, of the Class of 1826, Bowdoin's first black

graduate, publisher, and governor of the colony of Maryland in Liberia at the time of his death in 1851. The center houses the Afro-American Studies Program; the Herman S. Dreer Reading Room, named in honor of a black graduate of the Class of 1910; and a 1,500-volume library of African and Afro-American source materials.

Massachusetts Hall, planned in 1798 and completed in 1802 by Aaron and Samuel Melcher III, who designed the building as well, was the first College building erected. In 1936 it was remodeled, and five years later, through a gift of Frank Herbert Swan, LL.D., of the Class of 1898, the third floor was restored and furnished to accommodate faculty meetings. Until 1965 the building housed the offices of some of the administrative officers. Since then, it has been used for faculty offices. In 1971 the building was designated a Registered Historical Landmark.

Mayflower Apartments, at 14 Belmont Street, were acquired in 1972. Located within a few minutes' walk of the campus, the complex can accommodate a minimum of forty students.

Memorial Hall, designed by Samuel D. Backus and William G. Preston and built in 1868, is a structure of local granite in the Gothic style. It is a memorial to the alumni and students of the College who served in the Civil War and whose names and ranks are inscribed on bronze plaques in the lobby. The lower floor contains classrooms and an experimental theater, which is named in memory of George H. Quinby, director of dramatics for thirty-one years and professor of English emeritus. The entire interior was redesigned by McKim, Mead & White and rebuilt in 1954-1955 to house the Pickard Theater, one of the gifts of Frederick William Pickard, LL.D., of the Class of 1894. On the lower level is a plaque memorializing William H. Moody, of the Class of 1956, theater technician from 1958 until his death in 1976.

Malcolm E. Morrell Gymnasium, connected to Sargent Gymnasium, is a 50,000-square-foot building designed by Hugh Stubbins and Associates. Built in 1964-1965 from funds contributed during the Capital Campaign, it was in 1969 named in memory of Malcolm Elmer Morrell, of the Class of 1924, Bowdoin's director of athletics from 1928 to 1967. The gymnasium contains a modern basketball court with seats for about 2,500 persons, four visiting team rooms, eleven squash courts, offices for the director of athletics and his staff, and other rooms for physical education purposes.

The Moulton Union, designed by McKim, Mead & White, was built in 1927-1928. It was given and partially endowed by Augustus Freedom Moulton, LL.D., of the Class of 1873, as a social, recreational, and service center for the College. In 1964-1965, a two-story extension was added on the south and east sides of the building. The spacious main lounge and several smaller, intimate lounges and student activity areas are provided for general social

purposes. The Union also contains the College reception and information center; the campus telephone switchboard; a bookstore; dining facilities; and a game room. The Union stands just outside the quadrangle opposite Appleton, Hyde, and Moore halls.

The Observatory was designed by Samuel B. Dunning and erected in 1890-1891 with funds given by John Taylor, Esq., of Fairbury, Illinois. It stands on the southeast corner of Pickard Field and is reached from the Harpswell Road. In 1965 it was renovated and a new telescope was installed.

Pickard Field House stands at the entrance of Pickard Field. It was given in 1937 by Frederick William Pickard, LL.D., of the Class of 1894, and Mrs. Pickard. The building, designed by John Calvin Stevens, contains lockers and showers for men and women. **Pickard Field,** a tract of sixty-six acres, was presented to the College by Mr. Pickard in 1926. In 1952 nine acres were added to the field by purchase, making a total area of seventy-five acres, thirty of which are fully developed playing fields. The field contains the varsity and freshman baseball diamonds, several spacious playing fields for football and soccer, and ten tennis courts.

Pickard Theater in Memorial Hall, also a gift of Mr. Pickard, was designed by McKim, Mead & White and dedicated in 1955. It has a seating capacity of slightly more than 600 and a stage 55 feet wide and 30 feet deep. The space from the stage floor to the gridiron is 48 feet. Adorning the walls of the auditorium are rubbings of six large reliefs of the Chinese emperor T'ai Tsung's war horses. The reliefs were executed about A.D. 637 for the emperor's tomb and were possibly from designs of Yen Li-pen. The rubbings were the gift of Walter H. Mallery in 1955.

Rhodes Hall, formerly the Bath Street Primary School, was purchased from the Town of Brunswick in 1946 to provide additional facilities for instruction and administration. The building was named to commemorate the fact that three pupils of the school later achieved distinction as Rhodes scholars at Oxford University. Rhodes Hall houses the offices of the Department of Physical Plant.

Sargent Gymnasium and **General Thomas Worcester Hyde Athletic Building,** designed by Allen and Collens, were erected in 1912. The gymnasium was built from contributions from many of the students and alumni, and named in honor of Dudley A. Sargent, M.D., Sc.D., of the Class of 1875; the athletic building was given by John Hyde, Esq., of Bath, in memory of his father, Thomas Worcester Hyde, A.M., of the Class of 1861. In 1965-1966 Sargent Gymnasium was altered and renovated to make it part of the comprehensive plan for the indoor athletic facilities of the College.

Mary Frances Searles Science Building, designed by Henry Vaughan, was

built in 1894 and renovated in 1952. It was the gift of Edward F. Searles in memory of his wife. With the Walker Art Building and Gibson Hall, it forms the western side of the quadrangle. The building contains lecture rooms, laboratories, and libraries of the Departments of Biology and Physics. A battery of solid-state electronic equipment was installed in the Physics Department in 1974. It was purchased with funds provided by the bequest of Constance H. Hall. She was the daughter of Edwin H. Hall of the Class of 1875, best known for his discovery of the Hall Effect, which has become a key principle in the design of solid-state electronic components.

Sills Hall and **Smith Auditorium,** designed by McKim, Mead & White, were completed in the autumn of 1950. The main structure was made possible by the first appropriations from the Sesquicentennial Fund and was named after the eighth president of the College, Kenneth Charles Morton Sills (1879-1954), of the Class of 1901; the wing, containing an auditorium seating 210 persons, was built by appropriation of the Francis, George, David, and Benjamin Smith Fund, bequeathed by Dudley E. Wolfe, of Rockland. The Language Media Center, donated by the Pew Memorial Trust, and the electronic film production laboratory and speech center are located in the wing. In 1968 a donor who wished to remain anonymous established the Constance and Albert Thayer Speech Center Fund to maintain the speech center. The fund was named in honor of the late Albert R. Thayer, A.M., of the Class of 1922, Harrison King McCann Professor of Oral Communication Emeritus, and his wife.

Winfield Smith House, at 59 Harpswell Street, was acquired in 1972. A residence for students, it is named in memory of L. Winfield Smith, of the Class of 1907, who was born and raised in the house, "in recognition of the Smith family's long and devoted interest in Bowdoin."

10 Cleaveland Street is a residence for students.

12 Cleaveland Street houses the offices of the *Bowdoin Orient.*

30 College Street was acquired by the College in 1977 and is used as a residence for approximately fifteen students.

The Visual Arts Center, designed by Edward Larrabee Barnes and completed in 1975, was constructed with funds given through the 175th Anniversary Campaign. Connected to the Walker Art Building via an underground area which provides not only inter-access but also an exhibition gallery, the center contains some 23,000 square feet of instructional space. A 300-seat auditorium was dedicated in recognition of a generous grant from the Kresge Foundation. One of the classrooms has been dedicated in honor of Philip C. Beam, Ph.D., Henry Johnson Professor of Art and Archaeology Emeritus and a member of the faculty for more than forty years. The pho-

tography area was dedicated to the memory of Alan H. Wiley, and the printing and graphics area was given by an alumnus who wishes to remain anonymous.

Walker Art Building, designed by McKim, Mead & White, was erected in 1892-1894 and extensively renovated in 1975-1976. It was given by the Misses Harriet and Sophia Walker, of Waltham, Massachusetts, as a memorial to their uncle, Theophilus Wheeler Walker, of Boston, a cousin of President Woods. A bronze bulletin board in memory of Henry Edwin Andrews, A.M., of the Class of 1894, director of the museum, 1920-1939, is located in Sculpture Hall. The building is surrounded on three sides by a paved terrace with supporting walls and parapets of granite. Granite and bronze sculptures adorn the front wall. Following the renovation of the building, the South Gallery was dedicated to the memory of John A. and Helen P. Becker. The Central Gallery was dedicated to the memory of John H. Halford, Class of 1907, overseer and trustee of the College for twenty years.

Wentworth Hall was named in memory of Walter V. Wentworth, Sc.D., of the Class of 1886, an overseer of the College from 1929 to 1958. Constructed in 1964 and designed by Hugh Stubbins, it is a two-story building adjacent to Coles Tower and contains a dining room, main lounge, and other rooms for instructional, social, and cultural activities. In 1974 the main lounge was dedicated to the memory of Athern P. Daggett, Ph.D., LL.D., of the Class of 1925, acting president from 1967 to 1969 and for many years William Nelson Cromwell Professor of Constitutional and International Law and Government.

Women's Resource Center, at 24 College Street, houses a library and the office of the Bowdoin Women's Association, and provides student housing.

OTHER MEMORIALS

Albert Abrahamson '26 Reading Room, on the top floor of the newly renovated stack area of Hubbard Hall, is dedicated to the George Lincoln Skolfield, Jr., Professor of Economics Emeritus, member of the faculty for twenty-five years and generous benefactor of the library renovation project.

The Harold Lee Berry Special Collections Suite, in Hawthorne-Longfellow Library, is named in memory of Harold Lee Berry, A.M., of the Class of 1901, for nearly forty years a member of the Governing Boards, and generous benefactor of the College. The suite comprises several rooms in the northeast area of the third floor.

The Bowdoin Polar Bear, placed in 1937, is a memorial to members of the Class of 1912. The base and life-size statue were carved by Frederick George

Richard Roth. The figure stands in front of the entrance to the Sargent Gymnasium.

The Stuart Franklin Brown Lobby, in Hawthorne-Longfellow Library, is a memorial to Stuart Franklin Brown, of the Class of 1910, and was the gift of Mrs. Brown.

The Calder Mobile was purchased with funds given in the memory of Charles B. Price III, of the Class of 1974, who died in 1972. Purchased because Price was an admirer of the work of Alexander Calder, the mobile hangs in the Hawthorne-Longfellow Library. Price, a biology and economics major, was a Dean's List student and James Bowdoin Scholar.

Catlin Path, extending from the Warren Eastman Robinson Gateway to Hubbard Hall, was laid in 1954 through the generous gift of Warren Benjamin Catlin, Ph.D., for many years Fayerweather Professor of Economics and Sociology.

The Chase Memorial Lamps, dedicated to the memory of Stanley Perkins Chase, Ph.D., of the Class of 1905, Henry Leland Chapman Professor of English Literature (1925-1951), stand on the Moulton Union terrace. They were presented to the College by Mrs. Chase in 1954.

The Class of 1875 Gateway was designed by McKim, Mead & White and erected in 1901 as a memorial to members of the class. It forms the Maine Street entrance of the Class of 1895 Path.

The Class of 1878 Gateway, designed by Kilham and Hopkins and erected in 1903, is a memorial to members of the class. It is on Bath Street between Memorial Hall and the First Parish Church.

The Class of 1886 Pathways are a network of walks laid in 1945 as a memorial to members of his class through the generosity of Walter V. Wentworth, Sc.D., of the Class of 1886. The pathways traverse an area lying north of Massachusetts Hall.

The Class of 1895 Path was laid in 1945 as a memorial to members of the class. It extends from the Chapel to the Class of 1875 Gateway.

The Class of 1898 Bulletin Board, erected in 1924 near the Chapel, is a memorial to members of the class. It is made of bronze, is double-faced and illuminated.

The Class of 1903 Gateway, erected in 1928, is a memorial to members of the class. It forms the main entrance to the Whittier Athletic Field.

The Class of 1909 Organ, an electronic instrument for use in the Pickard Theater, was presented by the Class of 1909 on the occasion of its fiftieth an-

niversary and dedicated in June 1960. A fund given at the same time is for the maintenance of the organ and for the support of musical education in the College.

The Class of 1910 Path was laid in 1940 as a memorial to members of the class. It extends from Bath Street to Coleman Hall, running parallel to the four dormitories and in front of the entrance to the Chapel.

The Class of 1914 Librarian's Office, in the Hawthorne-Longfellow Library, is in honor of the members of the Class of 1914, who made a specific gift for this purpose.

The Class of 1916 Path was laid in 1946 as a memorial to members of the class. It extends from Massachusetts Hall to the Alpheus Spring Packard Gateway.

The Class of 1919 Path, laid in 1945, is a memorial to members of the class. It extends from the north entrance of Winthrop Hall, past the entrances to Massachusetts Hall and Memorial Hall, to the Franklin Clement Robinson Gateway.

The Class of 1922 Fountain, between Hawthorne-Longfellow Library and Hubbard Hall, was constructed in 1968. It is the gift of Mrs. John C. Pickard of Wilmington, Delaware, in honor of her husband's class. The fountain was designed by André R. Warren and was constructed by workmen of the Department of Physical Plant.

The Class of 1924 Radio Station (WBOR, "Bowdoin-on-Radio") was given by the Class of 1924 on the occasion of its twenty-fifth reunion. The station, installed in 1951 on the second floor of the Moulton Union, contains two broadcasting studios and a fully equipped control room.

The Class of 1929 Electronic Chimes System, for automation of the Chapel chimes, was presented by the Class of 1929 on the occasion of its fortieth reunion. A fund for maintenance of the system was established at the same time.

The Class of 1937 Lounge, in the Cram Alumni House, was presented by the Class of 1937 on the occasion of its twenty-fifth reunion. It is a large, informal, and rustic room, with pine furniture, old pictures of Bowdoin and of Brunswick, and a large hewn granite fireplace. The lounge was given in memory of Harold L. Cross, Jr., David T. Deane, J. Donald Dyer, and Maxwell A. Eaton, who gave their lives in the service of their country during World War II.

The Class of 1938 Newspaper Room, in the Hawthorne-Longfellow Library, is in honor of the members of the class. The room is on the first floor to the right of the entrance.

The Class of 1942 Cross was placed behind the reading stand in the Chapel in 1952 in memory of class members who gave their lives during World War II.

The Harry Howard Cloudman Drinking Fountain, erected in 1938, is in memory of Harry Howard Cloudman, M.D., of the Class of 1901, one of the outstanding athletes at the turn of the century. It stands near the Sargent Gymnasium.

The Robert Peter Tristram Coffin Reading Room, in the Hawthorne-Longfellow Library, is in memory of Robert Peter Tristram Coffin, Litt.D., of the Class of 1915, a distinguished author, poet, and professor. The room was the gift of the Class of 1915 on the occasion of its fiftieth reunion and occupies the northern bay on the first floor.

The Colbath Room, in the Morrell Gymnasium, is a memorial to Henry Jewett Colbath, of the Class of 1910, an outstanding athlete, dedicated teacher, and coach.

The William John Curtis 1875 Room, in the Hawthorne-Longfellow Library, is a memorial to William John Curtis, LL.D., of the Class of 1875, for over twenty-five years an overseer and trustee of the College, and a generous benefactor always in the name of his class. The room, in the northeast corner of the first floor, is used for current periodicals.

Daggett Lounge, the main lounge in Wentworth Hall, was dedicated in 1974 to the memory of Athern P. Daggett, Ph.D., LL.D., of the Class of 1925. Professor Daggett, a member of the faculty for more than forty years and acting president from 1967 to 1969, was William Nelson Cromwell Professor of Constitutional and International Law and Government at the time of his death in 1973.

The Dane Flagpole, in honor of Francis Smith Dane, of the Class of 1896, stands in the northwest corner of Whittier Field. The gift of Mrs. Annie Lawrence E. Dane and a member of her family, the flagpole was placed in 1954 in recognition of Mr. Dane's efforts as an undergraduate to acquire an adequate playing field for the College.

The James Frederick Dudley Classroom in Banister Hall was renovated and furnished in 1954 as a memorial to James F. Dudley, A.M., of the Class of 1865, by the bequest of Nettie S. Dudley.

The William Pitt Fessenden Conference Room, in Hawthorne-Longfellow Hall, is a memorial to William Pitt Fessenden, LL.D., of the Class of 1823, United States senator 1854-1864, 1865-1869; United States secretary of the treasury 1864-1865; and overseer and trustee of the College from 1843 to

1869. The room is on the second floor, near the offices of the president and deans.

The Melville Weston Fuller Reading Room, in Hawthorne-Longfellow Library, is a memorial to Melville Weston Fuller, LL.D., of the Class of 1853, chief justice of the United States Supreme Court from 1888 to 1910, and an overseer and trustee of the College from 1875 to 1910. The room occupies the southern bay on the first floor.

The Gardner Bench, near Hawthorne-Longfellow Library, is dedicated to the memory of William Alexander Gardner, of the Class of 1881, and was presented to the College by Mrs. Gardner in 1954.

The Greene Suite, an apartment on the sixteenth floor of Coles Tower, is a memorial to the Reverend Joseph K. Greene, of the Class of 1855, and to Professor Theodore M. Greene, L.H.D., and his wife Elizabeth R. Greene. The Reverend Mr. Greene, father of Professor Greene, was a missionary to Turkey. Professor and Mrs. Greene lived in the suite from 1966 to 1969 while he was visiting professor of philosophy.

The Lawrence Sargent Hall Room, on the second floor of Massachusetts Hall, was named in 1986 to honor Professor Hall, of the Class of 1936, Henry Leland Chapman Professor of English Literature. The room was Professor Hall's office for many years and will continue to be the office of the Henry Leland Chapman Professor of English Literature.

Hutchinson Lounge and **Hutchinson Terrace,** in Wentworth Hall, are memorials to Charles Lyman Hutchinson, of the Class of 1890, a prominent lawyer in Portland. They are on the south side of the building between the main dining room and lounge.

The Elijah Kellogg Tree, a large pine dedicated to the memory of the Reverend Elijah Kellogg, A.M., of the Class of 1840, stands near the corner of Bath Street and Sills Drive.

The Fritz C. A. Koelln Room, in Sills Hall, was dedicated in 1971 in honor of Fritz C. A. Koelln, Ph.D., George Taylor Files Professor of Modern Languages Emeritus and a member of the Department of German from 1929 until his retirement in 1971, "in recognition of his devoted service to the College and the inspiration he has been to so many undergraduates over the years."

The Donovan D. Lancaster Lounge, in the Moulton Union, was named in November 1970 in honor of Donovan D. Lancaster, of the Class of 1927, Director of the Moulton Union and the Centralized Dining Service Emeritus and a member of the College staff for over forty years. The lounge is used for lectures and exhibitions of art and photography throughout the year.

The George Thomas Little Bibliography and Card Catalogue Area, in Hawthorne-Longfellow Library, is a memorial to George Thomas Little, Litt.D., of the Class of 1877, librarian of the College from 1885 to 1915. The area occupies the center portion of the first floor.

Little Ponds Wildlife Sanctuary is the gift of Mrs. Harold Trowbridge Pulsifer, in memory of her husband, and Sheldon Ware, a neighbor. Located at Bethel Point, East Harpswell, and the result of a series of gifts beginning in 1961, this tract of fifteen acres includes a meadow, pond, woodland, and shore frontage. It is used for the study and conservation of wildlife and is the site of the Bowdoin College Marine Laboratory.

The Harrison King McCann Music Lounge, on the sixteenth floor of the Coles Tower, is a memorial to Harrison King McCann, A.M., of the Class of 1902, for thirty years an overseer of the College.

The Cecil Cleophus McLaughlin Study, in Chamberlain Hall, is a memorial to Cecil Cleophus McLaughlin, M.D., of the Class of 1923. The study was the gift of his wife.

The John Joseph Magee Track, surrounding Whittier Field, was given by a group of alumni and friends to honor the memory of John Joseph Magee, coach, trainer, and director of track and field athletics from 1913 to 1955 and an Olympic team coach in 1920, 1924, 1928, and 1932. Constructed in 1970, the Olympic regulation all-weather track was dedicated in 1971.

The Magee Training Room, in the Morrell Gymnasium, is another memorial to Coach Magee.

The Memorial Flagpole, designed by McKim, Mead & White, was erected in 1930 with funds given by the alumni in memory of the twenty-nine Bowdoin men who lost their lives in World War I. The Honor Roll is engraved on the mammoth granite base surmounted by ornamental bronze. The flagpole stands in the southwestern corner of the campus between Hubbard Hall, Walker Art Building, and Gibson Hall.

The Wilmot Brookings Mitchell Lounge, on the second floor of Wentworth Hall, is a memorial to Wilmot Brookings Mitchell, Litt.D., L.H.D., of the Class of 1890, a beloved teacher of English for almost fifty years.

The Morrell Office, in the Malcolm E. Morrell Gymnasium, was given by members of the Class of 1924 in honor of their classmate Malcolm Elmer Morrell, director of athletics from 1928 to 1967. It is the office of the director of athletics.

The Dean Paul Nixon Lounge-Conference Room, in Hawthorne-Longfellow Library, is a memorial to Paul Nixon, L.H.D., LL.D., for over forty

years a teacher of Latin and Dean of the College from 1918 to 1947. The room is on the southeast corner of the third floor.

The Alpheus Spring Packard Gateway, designed by Felix Arnold Burton and erected in 1940 on College Street, is a memorial to Alpheus Spring Packard, D.D., of the Class of 1816, a member of the Bowdoin faculty from 1819 to 1884.

The Peucinian Room, built in 1951, is in a corner of the lower floor of Sills Hall. It is paneled in timber taken from the Bowdoin Pines. The motto of the Peucinian Society, *Pinos loquentes semper habemus,* is carved on a heavy timber above the fireplace. The fireplace and paneling were the gift of the Bowdoin Fathers Association in memory of Suzanne Young (1922-1948).

The Pickard Trees, twelve hawthorns in memory of Jane Coleman Pickard (Mrs. Frederick William Pickard), donor of Coleman Hall and co-donor of the Pickard Field House, were replanted around Coleman Hall by the Society of Bowdoin Women and dedicated in June 1959.

The Franklin Pierce Reading Room, in Hawthorne-Longfellow Library, is in memory of Franklin Pierce, LL.D., of the Class of 1824, the fourteenth president of the United States. This informal reading room is at the east end of the second floor.

The William Curtis Pierce Library, on the second floor of the Visual Arts Center, was dedicated in honor of William Curtis Pierce, LL.B., LL.D., of the Class of 1928, in recognition of service to the College as an overseer, trustee, and supporter of the arts.

The Presidents' Gateway, erected in 1932, is a gift of the Class of 1907 in memory of William DeWitt Hyde, D.D., LL.D., president of the College from 1885 to 1917, and "as a mark of the enduring regard of all Bowdoin men for the leadership of their Presidents." The gateway forms one of the northern entrances to the campus from Bath Street.

The Franklin Clement Robinson Gateway, designed by Felix Arnold Burton and erected in 1923, is a memorial to Franklin Clement Robinson, LL.D., of the Class of 1873, for thirty-six years a teacher at Bowdoin College, and to his wife, Ella Maria Tucker Robinson. The gateway forms the northwestern entrance to the campus.

The Warren Eastman Robinson Gateway, designed by Felix Arnold Burton and erected in 1920 at the southwestern entrance to the campus, is a memorial to Lieutenant Warren Eastman Robinson, of the Class of 1910, who lost his life in the service of his country.

The Shumway Tree, a Rocky Mountain fir in memory of Sherman Nelson

Shumway, A.M., LL.B., of the Class of 1917, generous benefactor and an overseer of the College (1927-1954), was replanted on the campus and dedicated in June 1955. It stands in front of Hawthorne-Longfellow Hall.

The Simpson Memorial Sound System, the gift of Scott Clement Ward Simpson, of the Class of 1903, and Mrs. Simpson, is dedicated to the memory of their parents. The system, including a high-fidelity record player and other teaching aids in music, was installed in Gibson Hall in 1954. A fund for its maintenance was established by Mr. and Mrs. Simpson in 1955.

The Thorndike Oak, standing near the center of the campus, is dedicated to the memory of George Thorndike, of the Class of 1806, who planted the tree in 1802 after the first chapel exercises.

The Turner Tree, a maple in memory of Perley Smith Turner, A.M., of the Class of 1919, professor of education at Bowdoin (1946-1956), was replanted on the campus east of Smith Auditorium by classmates and friends and dedicated in June 1957.

The Gerald Gardner Wilder Cataloguing Room, in Hawthorne-Longfellow Library, is a memorial to Gerald Gardner Wilder, A.M., of the Class of 1904, librarian of the College from 1916 to 1944. The room is in the southeast area on the first floor.

The Philip S. Wilder Room, on the third floor of Hawthorne-Longfellow Hall, is named in honor of Philip S. Wilder, of the Class of 1923, in recognition of more than fifty years of devoted service to the College.

The Frank Edward Woodruff Room, in Sills Hall, is a memorial to Frank Edward Woodruff, A.M., a member of the Bowdoin faculty from 1887 to 1922. The room was provided in 1951 through the generous bequest of Edith Salome Woodruff.

General Information

Terms and Vacations: The College holds two sessions each year, beginning in September and January. The dates of the semesters and the vacation periods are indicated in the College Calendar on pages v-viii.

The New England Association of Schools and Colleges: Bowdoin College is accredited by the New England Association of Schools and Colleges.

Registration and Enrollment: All students are required to register at the opening of each semester in accordance with schedules posted at the College and mailed to students registering for the first time. A fee of $20 is assessed for late registration.

Statistics: As of June 1986, 25,987 students have matriculated at Bowdoin College, and 19,528 degrees in courses have been awarded. In addition, earned master's degrees have been awarded to 274 postgraduate students. Living alumni include 10,991 graduates, 2,058 nongraduates, 96 honorary graduates, and 263 graduates in the specific postgraduate program.

Offices and Office Hours: The Admissions Office is located in Chamberlain Hall. General administration and business offices are located in Hawthorne-Longfellow Hall, the west end of the Nathaniel Hawthorne-Henry Wadsworth Longfellow Library. The Development and Alumni Relations offices are located at 83 and 85 Federal Street. The Office of Career Services is in the Moulton Union. The office of the college counselor is in the Dudley Coe Health Center. The Department of Physical Plant is in Rhodes Hall.

In general, the administrative offices of the College are open from 8:30 A.M. to 5:00 P.M., Monday through Friday. Summer hours are from 8:30 A.M. to 4:00 P.M.

Telephone Switchboard: The College has a central telephone switchboard located in the Moulton Union. All college phones are connected to this switchboard. The number is 207-725-3000.

College Charges 1986-87: The charges for tuition, room rent, board and fees** for the College year 1986-87 are as follows:

	By Semester		Total
	Fall	Spring	For the Year
Tuition	$5,380.00	$5,380.00	$10,760.00
Board	1,065.00	1,065.00	2,130.00

Room Rent:			
Dormitories	835.50	832.50	1,665.00
Pine and Harpswell Street Apartments	1,145.00*	1,145.00*	2,290.00*
Other Apartments	952.50*	952.50*	1,905.00*
Student Activities Fee	45.00	45.00	90.00
Health Insurance	64.00	64.00	128.00***

* When normal occupancy is varied, rates may change accordingly.
** The College charges do not include costs for travel, books, or personal expenses; the student must budget for such items on his/her own.
*** These fees reflect current charges and may change for 1986-87.

For planning purposes, students and parents should anticipate that tuition and other charges may increase each year to reflect program changes and other cost increases experienced by the College.

College Bills: Statements and bills covering College charges will be sent to the student unless the Cashier has been requested *in writing* to direct them to someone other than the student. Semester statements will be sent to *every* student regardless of the payment option selected. Information about payment options is on pages 58-62.

Refunds: Refunds of tuition and fees for students leaving college during the course of a semester will be made in accordance with the following refund schedule:

During the first two weeks	80%
During the third week	60%
During the fourth week	40%
During the fifth week	20%
Over five weeks	No Refund

Refunds for board and room will be prorated on a daily basis in accordance with the student's attendance as it relates to the College's calendar, after adjustments for fixed commitments and applicable overhead expense. *Students who are dismissed from the College within the first five weeks for other than academic or medical reasons are not entitled to refunds.* Financial aid awards will be credited in proportion to educational expenses as stipulated in a student's award letter, but in no case will they exceed total charges to be collected. Application for a refund must be made in writing to the Cashier of the College within 30 days of the student's leaving.

Tuition: The tuition fee for the 1986-1987 academic year is $5,380 each semester or $10,760 for the year. There is a per-course charge of $1,345 for special students taking fewer than three courses a semester. Students who wish to register for fewer than three courses in their final semester must re-

quest permission to do so before July 1. If a later request is approved, a $225 surcharge will be added to the student's tuition bill in the appropriate semester. Any student completing the number of courses required for the degree in less than eight semesters must pay tuition for eight semesters, although the Dean of the College is authorized to waive the requirements in such cases where the factors of advanced placement, junior year abroad, exchange or transfer status, or similar special circumstances exist. Work taken at other institutions to make up deficiencies in scholarship at Bowdoin or the accumulation of extra credits earned by taking more than four courses during a semester shall not relieve the student of the obligation to pay tuition covering eight full semesters at Bowdoin College.

There are opportunities at Bowdoin to receive financial aid in meeting the charge for tuition. Detailed information about scholarships, loans, and other financial aid may be found on pages 70-75.

Room and Board: Freshmen may indicate their housing needs on a preference card issued by the Dean of Students' Office. Accommodations and roommates are assigned by that office. Sophomores, juniors, and seniors choose roommates and apply for housing to the Assistant Dean of Students. A $100 deposit is required by March 15 of each year from all students, except entering freshmen, who wish to reserve a room for the next academic year.

Suites in the dormitories consist of a study and bedroom which are provided with essential furniture. Students should furnish blankets and pillows; the College furnishes bed linen and towels. College property is not to be removed from the building or from the room in which it belongs; occupants are held responsible for any damage to their rooms or furnishings.

The College owns a variety of apartments located near the campus. Rent for these apartments has been set at $2,290 a student for Harpswell and Pine Street apartments and $1,905 a student for all others for 1986-1987. Rent for dormitory rooms and rooms in a fraternity house is $1,665.

Board is $2,130 for the year. These charges are the same regardless of whether a student eats at the Moulton Union, Coles Tower, or a fraternity.

Students who live in Bowdoin facilities, except apartments, are required to take a full board plan. Partial board packages are available to students living off-campus or in College-owned apartments.

Other College Charges: All damage done to the buildings or other property of the College by persons unknown may be assessed equally on all undergraduates. The College collects in each academic year a student activity fee of $90. The cost of tuition, board, room, and fees amounts to about $7,322.50 for the semester. To these items must be added the cost of textbooks, personal expenses (including travel), and fraternity expenses if applicable.

Health Care: The facilities of the Dudley Coe Health Center (licensed as a private general hospital) and the services of the college physician are

available to all students. If ill, students should report to the health center.

To cover costs of treatment and care during the college year, in the infirmary or elsewhere, each student is required to have adequate health and accident insurance. This must be purchased through the College (the present group rate of $64 per semester is subject to change), unless a student is covered otherwise by adequate health insurance certified by a parent or guardian at the time possible exemption from this requirement is requested. Students who purchase insurance through the College for either or both the fall and spring semester continue to be covered through the summer without additional charge.

Bills are rendered by the College for many medical services provided by the health center. Most of these costs are covered by the student health insurance available through the College. A pamphlet specifying the coverage provided by student health insurance is available from the Business Office. If parents choose not to purchase Bowdoin student health insurance, bills for services provided at the health center will be sent to the insurance carrier specified by parents. Any costs not covered by such family insurance will be charged to the student's account.

Motor Vehicles: All motor vehicles, including motorcycles and motor scooters, used on campus or owned and/or operated by residents of any College-owned residence or fraternity must be registered with Campus Security. The registration fee is $10 a year, one-half of which is payable each semester. Failure to register a motor vehicle will result in a fine of $25. Students wishing to register a vehicle for a period of time less than one semester must make special arrangements with Campus Security. All students maintaining motor vehicles at the College are required to carry adequate liability insurance. Parking on Campus Drive is limited and students will be assigned parking areas according to their living locations.

PAYMENT OPTIONS

Students and their parents or guardians may pay the college charges as they fall due each semester or in accordance with Bowdoin's ten-month installment plan. They may also arrange to pay the total due by using a mixture of these two payment arrangements. There is also a plan to spread payments over a period of one to fourteen years.

The payment dates in the Bowdoin-sponsored payment plans cannot be deferred for the convenience of families using guaranteed student and parent loans, or other tuition payment programs. Both long and short term financial arrangements should be made far enough in advance to assure payment on the required dates. Special problems or emergency situations can be discussed with the Cashier at any time.

Students with unpaid bills may not register for or attend classes, nor are

they eligible for academic credit, semester grade reports, transcripts, or degrees.

Option I

Payment by Semester: About July 15 a bill will be sent for the tuition, board, room rent, and fees for the fall semester. Credits (funds actually received) and *tentative credits* (funds not yet received but expected to arrive) will also appear on the bill. Bowdoin scholarship grants, payments from the family, or any other cash payments are examples of credits. Non-Bowdoin scholarship aid that has been reported, payments arranged for under the Bowdoin Installment Payment Plan, etc., are examples of tentative credits. The balance due is the difference between all charges and all of the credits and tentative credits. The bill for the spring semester will be sent about December 15.

Late Payment Charge: The balance due each semester will be considered overdue if not paid within 15 days of the billing date, and any unpaid balance will be subject to a late charge of 12.5% per annum.

Option II

The Bowdoin Installment Payment Plan (IPP): The Bowdoin Installment Payment Plan spreads the charges for a full year over ten months, beginning July 1. This program is administered on behalf of the College by The Knight Insurance Agency, Inc. of 53 Beacon Street, Boston, Massachusetts 02108.

Eligibility: Any parent or guardian of a Bowdoin undergraduate is eligible for this plan.

Application Deadline: Parents are urged to apply by June 15. Applications made after the start of the program (July 1) must be accompanied by an initial payment sufficient to become current with the regular payment schedule. Applications for the ten-month plan will not be accepted after August 15.

Amount to be Financed: The amount to be financed under IPP may not exceed the total net annual charges (total annual charges less scholarship and loans). If the amount to be financed is less than the net annual charges, the difference will appear as a balance due on the Bowdoin semester bill subject to the provisions of Option I. The minimum amount that can be financed is $1,000.

Finance Charge: A *Finance Charge* will be applied at an *Annual Percentage Rate of 12.5%* beginning on *August 1*.

Schedule of Payments: The first of ten monthly payments will be due on July 1, and subsequent payments will be due on the first day of each month thereafter until the entire unpaid interest and principal under IPP are paid.

Optional Payments: Additional optional payments over the basic schedule may be made at any time without penalty. The unearned finance charge will be rebated based on the actuarial method.

Application Fee: A $25.00 non-refundable application fee must be submitted when returning the IPP application.

Consumer Credit Sales Agreement: The parent and/or guardian must sign a Consumer Credit Sales Agreement providing for the payment of scheduled installments.

Payment Coupons: Parents or guardian will receive a book of dated coupons to identify each payment. Each monthly payment with coupon should be sent to The Knight Insurance Agency, Inc. (53 Beacon Street, Boston, Massachusetts 02108), which will handle the processing and accounting of the IPP for Bowdoin.

Interest Statements: Statements will be sent by the Knight Agency in January for the finance charges (interest) reportable on tax returns.

Delinquent Payments: In addition to the finance charge imposed under the IPP, a late charge of 5% of the monthly payment, or $5.00, whichever is less, will be charged on any monthly payment in default for a period of 10 days or more.

Acceleration: If any payment is overdue by 30 days or more, Bowdoin shall have the right to declare the entire unpaid balance in the IPP account immediately due and payable. The acceptance of partial payments shall not be considered a waiver of any such default. Upon payment in full, the unearned finance charge, if any, will be rebated based on the actuarial method.

Insurance: Insurance coverage for IPP is optional and is offered independently of Bowdoin College by The Knight Insurance Agency, Inc.

Option III

The Bowdoin College Student Loan Corporation has created an Extended Payment Plan (EPP) to help middle and upper-middle income families meet the substantial educational expenses for tuition, fees, room, and board. The plan allows families to structure payments for education over as little as one year or for as long as fourteen years, at a fixed, special rate of interest. Parents can select the amount they wish to borrow each year, and payments can be accelerated at any time, so parents can accommodate both the monthly amount and the length of their repayment schedule to their income, their assets, or other family circumstances. The EPP was designed specifically to provide for interest payments only on the amount borrowed while a student

is attending Bowdoin. Equal installments of principal and interest do not begin until after the student leaves the College.

Eligibility: Loans are available to credit-worthy parents or guardians of Bowdoin degree candidates, as well as to Bowdoin students in certain circumstances, if combined annual incomes are less than $125,000. The College will consider exceptions to this limit for families with more than one child in college at the same time or when there are unusual financial circumstances. Except for approved domestic or international exchange programs, students attending other institutions or taking leaves of absence are not eligible for parent loan support. Bowdoin will review the financial and credit information provided on the application prior to making the loan.

Amount of Loan: Those eligible may borrow an amount between $2,000 and $13,000 a year. The loan cannot, however, exceed the total of regular college charges minus any financial aid, including any Guaranteed Student Loan, received by the student.

Disbursement: Ordinarily, one-half of the annual loan will be credited to the student's account on August 1 and January 1. When late applications for parent loans are approved after these dates, any late charges due and payable to Bowdoin College may still be required.

Repayment: The provisions of the program provide for monthly payments of *interest only* on the loans for a period of up to four years while the student is in college and level monthly payments of principal and interest thereafter over a period of ten years. Interest charged under the program is 11⅞% per annum. Prepayment of loans in part or in full is permissible without penalty except for any interest charges past due. The entire principal and interest may become immediately due and payable at the option of the Bowdoin College Student Loan Corporation if (1) prior to graduation, the student ceases to be enrolled at Bowdoin College or ceases to be enrolled in an academic curriculum approved by the College, or (2) any regular installment shall remain unpaid for more than sixty (60) days after its due date.

Agreement: A single Extended Payment Plan Disclosure Statement and Promissory Note will be executed for the total amount to be borrowed each year.

Insurance Protection: Optional insurance coverage for the loan is offered independently by The Knight Insurance Agency, Inc. This insurance provides protection in the event of the borrower's death or total disability. The life insurance may cover all current and future payments contracted for under the terms of the promissory note. In the event of a total disability, the insurance covers all monthly loan payments for as long as the borrower remains disabled.

Applications: Applications for loans are ordinarily due July 1 for fall disbursement or December 1 for spring disbursement. To receive a Bowdoin Extended Payment Plan application, please contact the Director of Student Aid, Bowdoin College, Brunswick, Maine 04011; telephone (207) 725-3273.

Admission to the College

In January 1976 the Governing Boards of Bowdoin College approved the following statement on admissions:

> Our need to be selective has inevitably required that attention be given to the principles of selection. We approve the current admission policy which seeks students who share the common characteristic of being seriously committed to the pursuit of a liberal arts education, but who, beyond that, have different interests, backgrounds and skills. The common denominator of intellectual commitment presupposes a candidate capable of not merely handling the academic program but of profiting from it and contributing to it. Beyond that common denominator, a candidate ought ideally to possess some particular skill or interest or to represent a culture, region or background that will contribute to the diversity of the college.

One can analyze the profile of Bowdoin's most recent class and make a rough prediction of a particular student's chances for admission to the next class. In recent years, Bowdoin has admitted approximately one of four candidates. Sixty percent of those admitted will have graduated from a public school, and 80 percent of this group will have ranked in the top 10 percent of their graduating class. Well over half of the independent school graduates will have been in the upper third of their class. Although Bowdoin does not require that a student seeking admission take a prescribed number of courses, the typical entering freshman will have had four years of English, foreign language, mathematics, and social science and three and a half years of laboratory sciences.

Candidates applying to Bowdoin College are evaluated individually by members of the admissions staff in terms of four general factors:

Academic Record: Bowdoin is particularly interested in the superior student who seeks out and has excelled in a demanding college preparatory curriculum. Particular emphasis is placed on academic performance in the junior and senior years of secondary school.

References: As standardized test scores are an optional admissions requirement, the recommendations of the candidate's college adviser and a current English teacher as well as a second faculty recommendation of a student's choice, are important. Perceptions of the candidate's motivation, creativity, determination, and aptitude help the admissions staff sort out the very best from the very good.

Talent: Because of its small size and the variety of its academic and extra-

curricular offerings, the College is looking for a depth of talent and accomplishments in a few areas rather than surface involvement in many areas.

Class Composition: Rather than measure each individual candidate against fixed admissions standards, the College seeks a classful of differences: students with different talents, of differing backgrounds, from different places, with different points of view. Intellectual commitment must be demonstrated by all admitted candidates, however.

APPLICATION AND ADMISSION PROCEDURES

Early Decision: Each year Bowdoin offers admission to approximately one-third of its entering class through its Early Decision program. Those candidates who are certain that Bowdoin is their first choice should seriously consider this option since it may resolve the problem of college admission early in the senior year. Bowdoin is in agreement with other colleges regarding the general ground rules, which are as follows:

1. When candidates file a formal application for admission, they must state in writing that they wish to be considered for Early Decision and that they will enroll if admitted. Early Decision candidates may file regular applications at other colleges, but only with the understanding that these will be withdrawn and no new applications will be initiated if they are accepted on an Early Decision basis by their first-choice college. In other words, only one Early Decision application can be made, but other regular applications may be initiated simultaneously.

2. The completed Personal Application form and formal request for Early Decision, a School Report form, a secondary school transcript of grades, an English Teacher Comments form, and an additional teacher comments form must be submitted to Bowdoin by November 15. Decisions on Early Decision applicants, whose applications are complete by November 15, will be announced by late December.

3. Candidates admitted via Early Decision who have financial need as established by the guidelines of the College Scholarship Service and based on the Financial Aid Form will be notified of the amount of their award at the time they receive their Early Decision acceptance, provided their financial aid forms are on file at Bowdoin. It is Bowdoin's policy to fund all needy students who are admitted via Early Decision.

4. The submission of College Entrance Examination Board or American College Testing scores at Bowdoin is optional as an admissions requirement. Applicants need not be deterred from applying for Early Decision because they have not completed the CEEB or ACT tests.

5. An Early Decision acceptance is contingent upon completion of the senior year in good standing.

6. Most candidates not accepted under the Early Decision program will

automatically be transferred to the regular applicant pool. Failure to be admitted as an Early Decision candidate in no way prejudices one's chance for admission in the spring. Each year a number of applicants who are deferred under Early Decision are accepted in mid-April, when decisions on all regular admissions are announced.

7. Responsibility for understanding and complying with the ground rules of Early Decision rests with the candidate. Should an Early Decision candidate violate the provisions of the program, the College will reconsider its offer of admission (and financial aid if appropriate) to the candidate.

Regular Admission: The following items constitute a completed admissions folder:

1. The student's application form submitted with the application fee ($35) as early as possible in the senior year. The deadline for receiving regular applications is *January 15*.

2. School Report: The college adviser's estimate of the candidate's character and accomplishments and a copy of the secondary school record should be returned to Bowdoin no later than January 15. A transcript of grades through the mid-year marking period (Mid-Year School Report) should be returned to Bowdoin by February 15. If a student matriculates at Bowdoin College, the School Report and secondary school transcript *will* become part of the permanent college file and will be available for the student's inspection.

3. Recommendations: Each candidate is required to submit the English Teacher Comments form, which should be given to the English teacher for completion and returned as soon as possible and no later than January 15. An additional teacher comments form may be submitted if a student feels that another opinion is necessary. If students have any outstanding strength, particularly academic, that they feel should be documented in their Bowdoin application, they should have their teacher, coach, or club adviser write to Bowdoin directly. If a student matriculates at Bowdoin College, required references *will* become part of the permanent college file.

4. College Board Examinations or American College Testing Scores: Applicants are not required to submit results of CEEB or ACT tests. A candidate's overall academic record will always be considered first, with motivation, discipline, personality, and sensitivity viewed as important factors. If submitted, the CEEB or ACT scores will probably be helpful to the Admissions and Student Aid Committee in reaching a decision, but will be treated as secondary in importance. The candidate is responsible for making arrangements to take the College Board examinations and to see that Bowdoin receives the scores if he or she wants them to be considered as part of his or her application. Should Bowdoin receive the scores on the secondary school transcript, these scores will be inked out before the folder is read by the Admissions and Student Aid Committee. Candidates may report their scores or

instruct the College Board to send the scores to Bowdoin. Students choosing to submit their SAT and Achievement Test scores should complete the entire battery of examinations no later than January of the senior year.

Bowdoin is particularly attracted to the student who seeks out and excels in a demanding college preparatory curriculum. Its policy regarding the CEEB or ACT test scores favors the student who is a superior achiever in the classroom but who may not fare so well on national standardized tests. Eighty-five percent of the public school graduates in the Class of 1989 ranked in the top 10 percent of their senior classes.

N.B.—Since standardized test results are used for academic counseling and placement, all entering freshmen are required to submit scores before matriculating.

5. Visit and Interview: A personal interview at Bowdoin with a member of the admissions staff or senior interviewer is strongly encouraged but not required. Distance alone sometimes makes it impossible for candidates to visit the College. The Bowdoin Alumni Schools and Interviewing Committees (BASIC) are available in most parts of the country to assist those applicants. For further information see page 271. Candidates' chances for admission are not diminished because of the lack of an interview, but many times the interview impressions prove helpful in reaching a decision. In the Bowdoin interview students should be prepared to talk informally about their academic record (an unofficial transcript is helpful), interests, talents, and goals. Ten carefully selected and trained Bowdoin seniors conduct interviews to supplement regular staff appointments from September to January.

The Admissions Office is open for interviews throughout the year except from February 1 to April 15, when the staff is involved in the final selection of the class.

6. Notification: All candidates will receive a final decision on their application for admission by mid-April. A commitment to enroll is not required of any candidate (except those applying for Early Decision) until the Candidates' Common Reply date of May 1. Upon accepting an offer of admission from Bowdoin a student is expected to include a $200 admissions deposit, which is credited to the first semester's bill.

7. Candidates requiring an application fee waiver may petition for one through their guidance counselor.

Deferred Admission: Admitted students who wish to delay their matriculation to the College for one year in order to gain increased maturity and experience may request a deferment from the director of admissions. It is Bowdoin's policy to honor these requests and to hold a place in the next entering class for these students. A $200 admissions deposit must accompany the deferral request.

Admission with Advanced Standing: Bowdoin participates in the CEEB

Advanced Placement program and the International Baccalaureate Program and grants both advanced standing in courses and credit toward graduation to qualified students. Examinations in Advanced Placement subjects are given by the CEEB in May of each year, and students are granted placement or credit on the basis of their examination performance. In most departments, a score of 3, 4, or 5 results in students' being given credit for one or two semesters of college-level work in the subject; if students elect to continue that subject in college, they are given appropriate placement. A judgment on an entering student's departmental placement will be made during the course registration period through personal conferences with appropriate faculty members.

Candidates not offering Advanced Placement examinations may secure advanced placement by passing a qualifying examination at the College. Bowdoin recognizes the place of more advanced courses in secondary school and provides an opportunity for unusually qualified students to extend the range of work that they may do in school and college. Occasionally, students may gain sufficient credit to enable them to complete their college course in fewer than eight semesters. Applicants are strongly encouraged to take advantage of the Advanced Placement program and should request consideration for Advanced Placement and credit by arranging for all Advanced Placement Test scores to be sent to the Admissions Office.

A minimum grade of 5 is required to receive credit for the International Baccalaureate Program. In addition, to receive credit, students must take a higher level course in the appropriate department and cannot take a lower level course in the department.

Departments may opt to use the International Baccalaureate as a guide to placement only, not for credit. Departments may choose to require the taking of a placement exam before granting credit.

Credits Earned before Matriculation: Freshmen may apply a maximum of eight course credits toward the degree from the following sources: Advanced Placement Program, International Baccalaureate Program, and college credits from other institutions earned prior to matriculation.

Transfer Students: A limited number of students from other colleges and universities will be admitted each year to upper-class standing at Bowdoin. The following information pertains to transfer candidates:

1. Candidates should file a transfer application by April 15, and must arrange to have submitted at the same time transcripts of their college and secondary school records, statements from deans or advisers at their colleges, and at least two recommendations from current or recent professors. As soon as it becomes available, an updated transcript including spring semester grades should also be sent. Candidates whose applications are complete will normally be notified of Bowdoin's decision by late May.

2. Transfer candidates should have academic records of honors quality ("B" work or better) in a course of study which approximates the work that would have been done at Bowdoin, had they entered as freshmen. Bowdoin accepts transfer credit for liberal arts courses in which a grade of "C" or higher has been received. Further, transfer students should understand that although they may expect an estimate regarding class standing upon transferring, official placement is possible only after updated transcripts have arrived at our Registrars' Office and have been appraised by the Dean of the College and appropriate department chairmen.

3. Candidates entering the junior year will be given preference. Two years of residence is required for a bachelor's degree from Bowdoin. Students who have completed more than four semesters of college work are not eligible to transfer. Candidates must present one full year of academic credit to be considered for transfer.

4. The funds available for transfer students are limited by commitments the College has already made to needy enrolled students and incoming freshmen. All transfers are eligible for aid, based on financial need. Applicants for aid must file a Financial Aid Form with the College Scholarship Service by April 1.

Special Students: Each semester, as space within the College and openings within courses permit, Bowdoin admits a few special students who are not degree candidates. In general, this program is intended to serve the special educational needs of residents in the Brunswick area. Those who already hold a bachelor's degree from a four-year college are ineligible for the program. One or two courses are charged at a special rate and no more than two courses can be taken each semester. No financial aid is available for special students. Inquiries should be addressed to the transfer coordinator.

PROCEDURE FOR APPLICATION FOR FINANCIAL AID

Bowdoin is one of more than 1,000 colleges that ask candidates for financial aid to file information through the College Scholarship Service, CN6300, Princeton, New Jersey 08541, or P.O. Box 380, Berkeley, California 94701. This organization has been formed to simplify application procedures and to make decisions on awards as equitable as possible. Each applicant for financial aid must submit the Bowdoin Financial Aid Application (which is included with the Application for Admission) and must also obtain the Financial Aid Form (FAF) from his or her school and request the College Scholarship Service to forward a copy of this statement to Bowdoin. March 1 is the deadline for filing these applications (or December 1 for Early Decision applicants). Candidates should not be discouraged from applying to Bowdoin College for lack of funds. Because of its extensive scholarship grant and loan programs, Bowdoin's financial aid policy is to supplement family efforts so

that as many students as possible can be admitted each year with the full amount of needed financial assistance. In 1985-1986, approximately 33 percent of the entering class of 426 students received financial assistance. The amount of assistance intended to meet the individual's need is calculated from the information in the Financial Aid Form. The average award of grant and loan was about $8,820. Additional material about the program of financial aid at Bowdoin may be found on pages 70-75. Awards of financial aid are announced with the letters of admission.

All correspondence concerning freshman and transfer admission to the College and scholarship aid should be addressed to the Director of Admissions, Bowdoin College, Brunswick, Maine 04011; telephone (207) 725-3100.

Scholarships, Loans, and Financial Aid

Scholarship grants, loans, and student employment are the principal sources of aid for Bowdoin students who need help in meeting the expenses of their education. Bowdoin believes that students who receive financial aid as an outright grant should also expect to earn a portion of their expenses and that they and their families should assume responsibility for repayment of some part of what has been advanced to help them complete their college course. Grants will total about $3,200,000 in 1986-1987 and will be made to about 35 percent of the student body. All awards are made on the basis of satisfactory academic work and financial need, which is a requisite in every case. The financial aid program is coordinated by the director of student aid, to whom all applications, except those from students not yet enrolled in college, should be directed. Prospective freshmen should submit their applications to the director of admissions.

The College provides about $300,000 to aid recipients each year from loan funds under its control; another $500,000 in loan aid comes from private lenders under the terms of the Guaranteed Student Loan program. Long-term loans continue to be an integral part of financial aid, supplementing scholarship grants. On recommendation of the director of student aid, long-term loans may also be made to students not receiving scholarship grants. These loans, including Guaranteed Student Loans, National Direct Student Loans, and Bowdoin College Consolidated Loans, bear no interest during undergraduate residence. Interest is charged at 5% for the latter two loans; interest on Guaranteed Student Loans is set at 9% (8% for *new* borrowers beginning September 13, 1983). Payment over a ten-year period is called for beginning six months after graduation or separation; or after graduate school, two or three years of deferment for various categories of service or internships. National Direct Student Loans also provide for the waiver of some payments for persons who become teachers and/or who serve in the military. Small, short-term loans are available upon application at the Business Office.

The student employment program offers a wide variety of opportunities to undergraduates. These include direct employment by the College, employment by the fraternities, and employment by outside agencies represented on the campus or located in the community. Employment opportunities are open to all students who are interested, able, and willing to work. Commitments for employment are not made to freshmen until after the opening of college in the fall. The College participates in the Work-Study Program established under the Economic Opportunity Act of 1964, the Supplementary Educational Opportunity Grants Program established under the Higher Education Act of 1965, and the Pell Grant Program established under the Higher

Education Amendments of 1972. The College also works closely with several states which can provide handicapped students and those receiving other forms of state aid with financial assistance to help with their educational expenses.

Prematriculation Scholarships: About 140 freshmen each year receive prematriculation awards to help them meet the expenses of their first year. Recently the range of awards has extended from $500 to $14,000. As noted above, some awards are direct grants, but most include the tender of loans. The size and nature of these awards depend upon the need demonstrated by the candidates. Applications should be made to the director of admissions by March 1 of each year. Candidates will be notified of a prematriculation award at the time they are informed of the decision on their applications for admission, usually about April 15.

The general basis for determining the amount of all prematriculation scholarships is the individual's financial need. Need is determined by an analysis of the statements of financial resources submitted to the Financial Aid Office on the aid forms.

Freshmen who hold prematriculation awards may be assured of continuing financial aid that meets their needs in the upper-class years if grades each semester are such as to assure progress required for continued enrollment (see General Regulations, Section 8, page 78). In each upper-class year the proportion of financial aid offered as a grant will be progressively decreased, and that offered as a loan increased, except in the case of certain scholarships where the full award must be made as an outright grant.

All awards of financial aid made in anticipation of an academic year, including the freshman year, will remain in effect for the full year unless the work of the holder is unsatisfactory. Awards for such students may be reduced or withdrawn for one semester. Awards may also be reduced or withdrawn for gross breach of conduct or discipline.

General Scholarships: Awards similar to prematriculation scholarships are granted to undergraduates already enrolled in college on the basis of their academic records and their financial need. Normally, these awards are made at the end of one academic year in anticipation of the next, but applications may be made in November for aid to be assigned during the spring semester on a funds-available basis. Awards made for a full year are subject to the same provisions covering prematriculation awards, but those made for a single semester are not considered as setting award levels for the following year. Since its founding, Bowdoin College has been fortunate to have had many close friends, including alumni, faculty, and others, who have either bequeathed or made outright gifts in support of its endowment for scholarships. Bowdoin College issues a separate publication honoring those in whose names scholarships and book funds have been donated.

Information on the availability of scholarship and loan funds may be obtained through the College's Student Aid Office. Questions regarding the establishment of such funds should be directed to the Development Office.

Loan Funds: Loans are offered as complementary aid to scholarships in almost every case. The College has a number of loan funds of its own through the generosity of a variety of donors, and these are listed in a separate publication along with scholarship and book funds.

Employment Assignments: So far as practicable, all college student jobs paying as much as $200 a year will be assigned to students of recognized need.

Although most students must find their own jobs on campus, the annual student payroll is currently about $450,000.

Graduate Scholarships: These awards are made to students who have completed their work at Bowdoin and are pursuing advanced study at other institutions. Application should be made in writing to the director of student aid. They are described below.

Graduate Scholarships

ARTS AND SCIENCES

Charles Carroll Everett Scholarship: A fund bequeathed by Mildred Everett in memory of her father, Charles Carroll Everett, D.D., of the Class of 1850, the net income of which is given to that graduate of Bowdoin College whom the president and faculty shall deem the best qualified to take a postgraduate course in either this or some other country. (1904)

Timothy and Linn Hayes Scholarship Fund: A fund given by Timothy and Linn Hayes for support of postgraduate or undergraduate studies in the social sciences, i.e., those branches of knowledge which deal with the institutions and functioning of human society and with the interpersonal relationships of individuals as members of society. (1970)

Guy Charles Howard Scholarship: A fund bequeathed to the College by Ethel L. Howard in memory of her brother, Guy Charles Howard, of the Class of 1898, the income of which is to be used to enable "some qualified student to take a postgraduate course in this or some other country, such student to be designated by the Faculty." (1958)

Henry W. Longfellow Graduate Scholarship: A fund given by the daughters of Henry W. Longfellow, of the Class of 1825—Alice M. Longfellow, Edith L. Dana, and Annie L. Thorpe—for a graduate scholarship "that would enable a student, after graduation, to pursue graduate work in some other college, or abroad if considered desirable; the work to be done in

English, or general literature, and the field to be as large as possible—Belles Lettres in a wide sense. The student to be selected should be one not merely proficient in some specialty, or with high marks, but with real ability in the subject and capable of profiting by the advanced work, and developing in the best way." (1907)

The Wilmot Brookings Mitchell Graduate Scholarship: An award from a fund established by Hugh A. Mitchell, of the Class of 1919, "to honor the memory of my father and his love for Bowdoin." Professor Mitchell was a member of the Class of 1890 and from 1893 to 1939 Edward Little Professor of Rhetoric and Oratory. The award is made by the president upon recommendation of a committee composed of the three senior professors of the Department of English "to a member of each graduating class who has majored in English and intends to teach English, the winning candidate to be selected on the basis of character as well as superior ability and talent for teaching." The award is to be used to help defray the costs of graduate work in a leading university in this country or England. (1965)

Galen C. Moses Postgraduate Scholarship: A fund bequeathed by Emma H. Moses in memory of her husband, a member of the Class of 1856, the income to be awarded and paid to the student most proficient in any natural science during his or her undergraduate course, who shall actually pursue a postgraduate course in such science at any recognized college or university; said income to be paid to such student for a period not exceeding three years, unless he or she sooner completes or abandons said postgraduate course. (1934)

O'Brien Graduate Scholarship: A fund given by Mrs. John Washburn, of Minneapolis, in memory of her uncles, John, William, Jeremiah, and Joseph O'Brien, for a "scholarship, preferably a graduate scholarship, for a student, or students, to be selected annually by the Faculty, who shall be deemed most suitable to profit by travel or advanced study, either in this country or abroad." (1937)

Nathan Webb Research Scholarship in English or English Literature: A fund bequeathed to the College by Dr. Latham True in memory of his wife's father, the Honorable Nathan Webb, LL.D., the income to be used to support a scholarship of $1,200 annually. The recipient must have received an A.B. from Bowdoin, preferably be unmarried, and use the scholarship in the study toward a Ph.D. "If deemed advisable, the said scholarship may be awarded to the same student for two or three years in succession, but no longer." (1963)

LAW AND MEDICINE

Garcelon and Merritt Fund: An award from the income of this fund, established in memory of Seward Garcelon, of the Medical Class of 1830, and

Samuel Merritt, of the Medical Class of 1843, is appropriated annually for medical scholarships. The larger part of the amount is awarded to students pursuing their studies in medical schools, and the remainder may be assigned to students in the College who are taking premedical courses; but, at the discretion of the Board of Trustees, all of the income available may be assigned to students in medical schools.

Awards are made only to worthy and struggling young students "in need of pecuniary aid," and preference is given to graduates and former students of Bowdoin College. Applications from those not graduates or former students of Bowdoin College, but who are residents of the State of Maine, may be considered after they have completed one year in medical school. (1892)

George and Mary Knox Scholarship Trust: A fund created under the will of George B. Knox, of the Class of 1929, for scholarships to be used for Bowdoin graduates attending Harvard Business, Law, and Medical Schools. (1984)

Lee G. Paul Scholarship: A fund given by Lee G. Paul, of the Class of 1929, the income to be used to provide financial assistance to graduates attending the Harvard University School of Law and requiring financial aid.

To qualify for a scholarship award from this fund a student must have been admitted to the College only after meeting all requirements for admission applicable to all candidates for admission and must have met during his undergraduate years at the College at least the minimum standards of performance expected of all students.

There is to be no discrimination either in favor of or against any student because of race, color, creed, sex, or disadvantaged background in the award of scholarships from this fund. (1964)

Dr. Clinton Noyes Peters and Alice F. Peters Medical Education Fund: A fund established by the will of Clinton N. Peters, M.D., of the Class of 1910 and the Medical School Class of 1914, the income of which is to be used to aid Maine-born medical students who are graduates of the College and have been accepted by or are attending medical school. Any funds not used for medical school scholarships shall be used for aid to Maine-born undergraduates who have indicated an intention to attend medical school.

Robinson-Davis Fund: A fund given in trust under the will of Beatrice R. Davis in memory of Frank W. Robinson and Dr. Horace A. Davis, the income to be used to provide graduate scholarships for students, preferably natives and residents of Maine. Forty percent of the income is to be used for those who intend to study and practice law. The balance is for those who intend to study and practice medicine. (1972)

Earl Kendall Van Swearingen Scholarship Fund: A fund established by

the bequest of Eleanore Maria Van Swearingen, the income to be used to support a "scholarship or scholarships to be awarded to the best premedical students for their medical education." (1969)

MISCELLANEOUS

Harold Hitz Burton Student Book Fund: A fund given in honor and memory of the late Honorable Harold Hitz Burton, LL.D., of the Class of 1909, by members of the Bowdoin Club of Washington and others to assist needy Bowdoin undergraduates in the purchase of books required in their courses. Administered by the Dean of Students. (1967)

Computer Loan Fund: A loan fund established to enable members of the faculty and administrative staff to purchase computer equipment for professional and personal use. The fund is administered by a committee comprising the treasurer, the Dean of the College, and the chairman of the faculty computing center committee. (1984)

Davis Fund: A fund established by Walter G. Davis to encourage undergraduate interest in international affairs. Administered in such manner as the president of the College may direct. (1934)

Mason-Le Cannellier Fund: A fund established in honor of William R. Mason and Jean and Monique Le Cannellier "for the purpose of providing loans and/or grants to admitted, nonmatriculated freshmen students (with preference to those of middle-income families) to facilitate travel or the pursuit of an alternative non-academic experience for a few months or a year before the students commence studies at Bowdoin." Awards are made at the discretion of the director of admissions. (1982)

Dean Paul Nixon Discretionary Fund: A fund established by E. Jeffrey Gilman of the Class of 1940, and his wife, Barbara Drummond Gilman, in honor and memory of Paul Nixon, who joined the faculty of Bowdoin in 1909 and served as Dean of the College from 1918 to 1947. The fund is administered by the Dean of the College, "with an award to be made whenever the Dean of the College feels that a student deserves encouragement and a 'pat on the back'—not necessarily for a great action but for any of those moments which call for a 'pat on the back.'" (1981)

John L. Roberts Fund: A fund given by John L. Roberts, of the Class of 1911, to assist some underprivileged scholar, other than a teacher or one contemplating teaching, to do research in any field he may choose. (1958)

Richard White Foundation Fund of Bowdoin College: A fund established by the Richard White Foundation to provide food and recreation at Thanksgiving and Christmas to the "two members of the freshman class most in economic need." (1978)

The Curriculum

Bowdoin does not prescribe specific liberal arts courses for all students. Instead, each student determines, with the help and approval of an academic adviser, an appropriate pattern of courses. To ensure that students explore the breadth of the curriculum before settling upon a major, they are expected to complete two courses each in natural science and mathematics, social and behavioral science, humanities and fine arts, and foreign studies. Courses, it is assumed, do not lead simply to other courses in the same subject. Properly taught, they should raise questions and evoke a curiosity that other disciplines must satisfy. The College also recognizes through its course offerings the importance of relating a liberal education to a society whose problems and needs are continually changing.

The breadth of a liberal arts education is supposed to distinguish it from professional training, and its depth in one field, from dilettantism, although in fact it shares qualities of both. Bowdoin encourages the student to extend his or her concerns and awareness beyond the personal. At the same time the College helps a student to integrate curricular choices in accordance with individual intellectual needs. Interaction between the student and an academic adviser is a vital part of this educational experience.

REQUIREMENTS FOR THE DEGREE

To qualify for the bachelor of arts degree, a student must have:

1. successfully passed thirty-two courses;
2. completed a departmental major or majors, an interdisciplinary major, or a student-designed major (a departmental minor may be completed with any of the preceding);
3. spent four semesters (passing at least sixteen courses) in residence, at least two of which will have been during the junior and senior years;
4. completed at least two semester courses in each of the following divisions of the curriculum: natural science and mathematics, social and behavioral sciences, humanities and fine arts; and two semester courses in foreign studies.

GENERAL REGULATIONS

1. **Course Load:** Students are required to take the equivalent of four full courses each semester. Students wishing to take more than *five* courses must have permission of the Deans' Office. A student may not take five courses in the semester following the receipt of an "F" without the dean's approval. Juniors or seniors who have accumulated extra credits may apply

to the Deans' Office for permission to carry a three-course load once during their last four semesters at Bowdoin. In addition, students entering their final semester with extra credits from Advanced Placement tests, study away, or summer school may request a reduced load of one or two courses. No extra tuition charge is levied upon students who register for more than four courses and, by the same token, no reduction in tuition is granted to students who choose to register for three courses.

2. **Course Examinations:** The regular examinations of the College are held at the close of each semester. An absence from an examination entails the mark of zero. In the event of illness or other unavoidable cause of absence from examination, the Deans' Office may authorize makeup of the examination.

3. **Course Grades:** Course grades are High Honors, Honors, Pass, Credit, and Fail. High Honors indicates excellent work. Honors indicates good work. Pass indicates satisfactory work. Credit indicates passing work, without further distinction as to quality, in a course elected by a student to be graded on a Credit/Fail basis. Fail indicates unsatisfactory work. In independent study courses that will continue beyond one semester, instructors shall have the option of submitting at the end of each semester except the last a grade of "S" for Satisfactory in place of a regular grade. A regular grade shall be submitted at the end of the final semester and shall become the grade for the previous semesters of independent study.

4. **Incompletes:** With the approval of the dean, a grade of Incomplete may be recorded in any course for extenuating circumstances such as family emergency, illness, etc. At the time an Incomplete is agreed upon by the dean and the instructor, a date shall be set by which all unfinished work must be turned in by the student to the instructor. Ordinarily, this will be no later than the end of the second week of classes of the following semester. The instructor must submit a final grade within two weeks of this date. If the course work is not completed within the specified time limit, the Incomplete will be changed to Fail. Any exceptions to this rule or a change of the specified time limit will require approval of the Recording Committee.

5. **Credit/Fail Option:** A student may elect to enroll in a limited number of courses on a Credit/Fail basis. Graduation credit is given for courses in which a grade of Credit is received. A student may elect no more than one course of the normal four-course load each semester on a Credit/Fail basis and no more than four such courses during the undergraduate career. However, a student may elect a fifth course any semester on a Credit/Fail basis. No course may be changed from graded to Credit/Fail or vice versa after the first week of classes.

6. **Grade Reports:** A report of the grades of each student is sent to the student at the close of each semester.

7. **The Dean's List:** Students who receive grades of Honors or High

Honors in all regularly graded courses and Credit in all other courses for a semester are placed on the Dean's List.

8. Deficiency in Scholarship: Students are expected to make normal progress toward the degree. Normal progress is defined as passing four full-credit courses each semester. Students may not matriculate in a fall semester if they are more than two course credits short of normal progress. Students who fail to meet this matriculation standard may enroll after a suspension of one semester with approval of the dean.

The records of students who fail more than one course are reviewed by the Recording Committee at the end of each semester. Students who fail three or more courses at the end of the first semester of the freshman year or who fail two or more courses at the end of any other semester are normally dismissed from the College. Students for whom dismissal is waived must take and pass four courses the following semester. Their records will be reviewed by the Recording Committee at the end of that semester.

Students who have been dismissed may apply for readmission after an absence of one semester. An application for readmission consists of a letter from the student stating why the student considers himself or herself ready to resume college work successfully together with two letters of recommendation from persons who have known the student during the time away from Bowdoin, commenting on the student's readiness to resume college work.

A student is dismissed permanently from the College if he or she is subject to dismissal a second time for failures in two or more courses.

9. Maximum Residency: No student will ordinarily be permitted to remain at Bowdoin for more than nine semesters of full-time work.

10. Senior Course Selection: A student may be required to take a course in his or her major department in each semester of the senior year at the department's discretion.

11. Leave of Absence: A student in good standing may, with the approval of his or her adviser, apply to the Recording Committee for a leave of absence for nonacademic pursuits for one or two semesters. The leave must begin at the end of a regular semester. A student on approved leave is eligible for financial aid upon his or her return. A student wishing to apply for a leave of absence for one or both semesters of an academic year must submit an application by April 1 of the previous academic year. Applications for leave of absence submitted during the fall semester requesting a leave for the next spring semester will be considered only in the most urgent circumstances. Academic credit may not be transferred to Bowdoin for courses taken while on leave.

ADVISING SYSTEM

Each student is assigned an academic adviser at the start of the freshman year. Whenever possible, the adviser is from a field of study in which the stu-

dent has shown some interest. Advisers and students meet during orientation before the start of fall semester classes and on a systematic basis thereafter.

During the first week of classes the student chooses courses and asks the adviser to approve the selection by signing the registration card. Should a student and adviser find themselves in disagreement over the wisdom of the selection, a subcommittee of the Recording Committee acts as arbiter.

Students elect a major during the second semester of the sophomore year. After registering for a major, a student is advised by a member of his or her major department.

COMPOSITION

The importance of good writing to a student's success in college is obvious. Students are encouraged to enroll in one of the freshman seminars in which composition is taught **(English 10-25).** Students with serious writing problems are identified by the Deans' Office and are advised to enter a special tutorial program.

DISTRIBUTION REQUIREMENTS

Students must complete at least two courses in each of the three divisions of the curriculum and two courses in foreign studies, normally by the end of the sophomore year. A course which counts for one distribution area may not count for another. Because these requirements are intended to apply to the college liberal arts experience, they may not be met by advanced placement or international baccalaureate credits but can be met, under the supervision of the Recording Committee, by credits earned while studying away from Bowdoin. Areas of distribution are defined as follows:

Natural Science and Mathematics: Biochemistry, biology, chemistry, computer science and information studies, geology, mathematics, physics, and certain environmental studies courses.

Social and Behavioral Sciences: Afro-American studies, economics, government, psychology, sociology and anthropology, and certain environmental studies courses.

Humanities and Fine Arts: Art, classics, education, English, German, history, music, philosophy, religion, Romance languages, and Russian.

Foreign Studies: Students must take two courses which focus on a culture or society of Asia, Africa, Latin America, or Russia—or on a culture or society with such origins. The requirement is intended to introduce students to cultures fundamentally different from their own to open their minds to different ways in which other people perceive and try to cope with the challenges of life. Though courses treating North American and European topics will not normally count, courses on Afro-American or Native American cultures will meet the requirement when the emphasis is clearly on those cultures and their differences from the predominant culture of the United States. Language

courses do not normally meet this requirement. Approved courses are indicated by a dagger (†) in the list of "Courses of Instruction" in this catalogue, pages 90-214.

THE MAJOR PROGRAM

Students may choose one of five basic patterns to satisfy the major requirement at Bowdoin: a departmental major, two departmental majors, an interdisciplinary major, a student-designed major; a departmental minor may be completed with any of the preceding. Each student must choose a major by the end of the sophomore year after consultation with the department or departments involved. No student may major in a department unless the department is satisfied that the student is able to do work of at least passing quality in its courses. Seniors may add or change majors and/or minors until the end of the first semester of their senior year. Changes by seniors in interdisciplinary or self-designed majors require the approval of the Recording Committee. A student who has not been accepted in a major department cannot continue registration.

Options for major programs are described below.

Departmental Majors

All departments authorized by the faculty to offer majors specify the requirements for the major in the catalogue. A student may choose to satisfy the requirements of one department (single major) or to satisfy all of the requirements set by two departments (double major). A student may drop a second departmental major by notifying both the registrar and the department concerned at any time.

Interdisciplinary Major

As the intellectual interests of students and faculty alike have reached across departmental lines, there has been a growing tendency to develop interdisciplinary majors. Interdisciplinary majors are designed to tie together the offerings and major requirements of two separate departments by focusing on a theme which integrates the interests of those two departments. Such majors usually fulfill most or all of the requirements of two separate departments and usually entail a special project to achieve a synthesis of the disciplines involved.

Anticipating that many students will be interested in certain patterns of interdisciplinary majors, several departments have specified standard requirements for interdisciplinary majors. For descriptions of these interdisciplinary majors see pages 164-165.

A student may take the initiative to develop an interdisciplinary major by consulting with the chairmen of the two major departments. A stu-

dent may not select an interdisciplinary major after the end of the junior year.

Student-Designed Major

In some cases, a student may wish to pursue a major program which does not fit either of the patterns described above. The faculty has authorized a pattern which permits a student working together with two faculty members to develop a major program which may draw on the offerings of more than two departments. Guidelines for the development of student-designed majors are available from the Deans' Office. No student may apply for a student-designed major after the end of the sophomore year.

Departmental Major and Departmental Minor

Students may fulfill the major requirements of one department and meet the minor requirements of any other department or program, subject to the approval of that department or program.

The Minor

All departments and some programs offer a minor program consisting of no fewer than four courses and no more than seven courses including all prerequisites. A minor program must be planned with and approved by the student's major department, and approved by the student's minor department. A minor may be dropped at any time by notifying both the registrar and the department or program concerned, but may not be added after the end of the first semester of the senior year.

INDEPENDENT STUDY

With departmental approval, a student may elect a course of independent study under tutorial supervision. (Freshmen and sophomores require the approval of the dean as well.) In most departments the project will consist of a written dissertation or an appropriate account of an original investigation, but projects in music, the fine arts, and letters are also encouraged. *Students who seek departmental honors are expected to register for at least one course in independent study and to achieve an honor grade in it. Independent study may not be taken on a credit/fail basis.*

A department will ordinarily approve one or two semesters of independent study for which regular course credit will be given. A definite plan for the project must be presented by the student, approved by the department, and filed in the Dean of the College's office. The plan must be submitted with the course registration card by the end of the first week of classes. Where more than one semester's credit is sought for a project, the project will be

subject to review by the department at the end of the first semester. In special cases, the Recording Committee, upon recommendation of the department, may extend credit for additional semester courses beyond two. In independent study courses that will continue beyond one semester, instructors shall have the option of submitting at the end of each semester except the last a grade of "S" for Satisfactory in place of a regular grade. A regular grade shall be submitted at the end of the final semester and shall become the grade for the previous semesters of independent study. The final corrected copy of the project must be submitted to the department before the last day of classes of the final semester of the work. Normally, the evaluation of an independent study project should be made by two faculty members. *For administrative purposes, this independent study will bear one or more of the course numbers 291, 292, 293, 294, 401, 402, 403, 404, depending upon the number of course credits allowed.*

THE AWARD OF HONORS

Departmental Honors

The degree with *honors, high honors,* or *highest honors* in a major subject is awarded to students who have distinguished themselves in that subject. The award is made by the faculty upon recommendation of the department. It is based upon honor grades in at least a majority of major courses, honor grades in any departmental special major requirements, and honor grades in independent study in the major department.

All written work in independent study accepted as fulfilling honors requirements shall be deposited in the library in a form specified by the Library Committee.

General Honors

General Honors are awarded on the basis of a student's final six semesters *at Bowdoin,* except that a student who receives a Failure in any course at Bowdoin or in any course at an institution from which academic credit is being transferred to Bowdoin is normally not eligible for General Honors. No student who has studied at Bowdoin for fewer than six semesters is eligible.

A degree *cum laude* shall be awarded to a student who receives at least 75 percent Honors or High Honors. Within the honor grades, there must be two High Honors for each Pass.

To receive a degree *magna cum laude* a student shall fulfill the requirement for a degree *cum laude,* with the additional stipulation that at least 30 percent of the student's grades must be High Honors in addition to the High Honors balancing the Passes.

A degree *summa cum laude* shall be awarded to a student who receives at least 70 percent High Honors and the balance Honors.

SPECIAL PROGRAMS

Architectural Studies

Although the college offers no special curriculum leading to graduate study in architecture, students interested in a career in this field should consult with members of the Studio Art Division of the Department of Art as early as possible. In general, students should develop the ability to conceive and to articulate architectural and spatial concepts in two and three dimensions and visual ideas through drawing model making. Recommended courses may be found on pages 102 and 103.

Arctic Studies

A concentration in Arctic Studies, offered through the Department of Sociology and Anthropology and the Peary-MacMillan Arctic Museum and Arctic Studies Center, provides students with opportunities to explore cultural, economic, and environmental issues involving arctic lands and peoples. Students interested in the Arctic are encouraged to consult with the director of the Arctic Studies Center in order to plan an appropriate interdisciplinary program.

Asian Studies

Although there is no formal program in Asian Studies, courses in this area are taught in the Departments of Art, Economics, English (Theatre), Government, History, Religion, and Sociology and Anthropology, with the largest number of courses found in history and religion. Two years of Chinese language are regularly offered, and Japanese is available at Bates College (see Independent Language Study). Advanced seminars in Asian Studies taught at Bates and Colby may also be open to interested Bowdoin students.

Bowdoin participates in two study away programs, the Intercollegiate Sri Lanka Education (ISLE) Program and the New York-New England China Consortium, which sponsors the fall semester in Beijing. A dozen other study away programs in Japan, the Peoples' Republic of China, Hong Kong, Taiwan, Singapore, and India are also available.

At this time, no formal major in Asian Studies exists. However, there are two routes that students interested in such studies may follow. One is the East Asian concentration within the history major. The other is the student-designed major, which allows considerable latitude in putting together an Asian Studies program.

For more information, interested students should consult with Professor

John C. Holt in the Department of Religion or Professor G. E. Kidder Smith, Jr., in the Department of History.

Fall Term in Beijing

The Fall Term in Beijing is a program of intensive Chinese language study combined with courses on Chinese society and history. The program, presently in its third year, is open to twenty to twenty-five students with a serious interest in China from Bates, Bowdoin, Colby, Hampshire, Hobart and William Smith, Mount Holyoke, and Williams Colleges. It provides an opportunity to gain a first-hand understanding of contemporary China through course work and guest lectures, frequent field trips, travel to other parts of China, and introductions to Chinese college students. Through special arrangement it is possible to remain in Beijing for the spring semester as well.

Foreign Language Literature Courses in Translation

Each year the Departments of Classics, German, Romance Languages, and Russian may offer literature courses in English translation which are open to students with no training in the foreign language. A list of such courses follows. For detailed course descriptions, consult the departmental listings, pages 90-214.

Classics

Greek 52. Greek Literature in Translation. Spring 1988. Mr. Ambrose.

German

51. German Literature in Translation. Every fall. Ms. Cafferty.
Fall 1986. **Literature of the Two Germanies: Texts and Contexts.**

Romance Languages

French 322. French Literature in Translation.
Spring 1987. **The French Enlightenment.** Mr. Brogyanyi.

Spanish 322. Spanish Literature in Translation.
Spring 1987. **Twentieth-Century Latin American Literature.** Ms. Hunsinger.

Russian

319. Nineteenth-Century Russian Literature. Fall 1987. Ms. Knox.
320. Twentieth-Century Russian Literature. Spring 1988.
321. Topics Course.
Fall 1986. **Russian Drama.**
Fall 1988. **Women in Russian Society and Culture.**
322. Dostoevsky and the Novel. Spring 1987. Ms. Knox.

Freshman Seminars

The purpose of the freshman seminar is to introduce the academic discipline in which the seminar is offered and, in a broader sense, to contribute to a student's understanding of the ways in which a specific discipline may relate to other areas in the humanities, social sciences, and sciences. A major emphasis of each seminar will be placed upon the improvement of the student's individual skills—his or her ability to read texts effectively, to write prose that is carefully organized, concise, and firmly based upon evidence.

Each year a number of departments offer freshman seminars. Enrollment in each is limited to sixteen students. Sufficient seminars are offered to ensure that every freshman will have the opportunity to participate during at least one semester of the freshman year. Registration for the seminars will take place before registration for other courses, to facilitate scheduling.

Seminars to be offered in 1986-1987 are listed below and are described under the appropriate departments:

Fall	*Spring*
Art 10, 1	English 20-27
English 10-19	History, Seminar 18
History, Seminars 13, 15, 16	Philosophy 14
Philosophy 15	Religion 11
Religion 10	
Sociology 11	

Health Professions

Students contemplating the study of medicine, dentistry, or one of the other health professions are advised to discuss their undergraduate course with the adviser for the health professions, Dr. Roy E. Weymouth, Jr., college physician. A meeting of students interested in the health professions is held at the opening of college each fall. Other meetings intended to be of help and interest to prehealth professional students are announced during the year.

Independent Language Study

For a detailed description of this program, see pages 162-163.

Intercollegiate Center for Classical Studies in Rome

The Intercollegiate Center for Classical Studies in Rome, established in 1965, provides undergraduates with an opportunity to study Greek and Latin literature, ancient history and archaeology, and ancient art. Students must take four courses, but may take a fifth. The center operates two semesters

each academic year. Further information about the program may be obtained from John W. Ambrose, Jr., in the Department of Classics.

Intercollegiate Sri Lanka Educational Program (ISLE Program)

Bowdoin and five other private liberal arts colleges (Bates, Carleton, Colby, Hobart and William Smith, and Swarthmore) have organized a study program in Sri Lanka to facilitate a rigorous and authentic intellectual and cultural experience for mature, motivated students with a demonstrated interest in South Asian studies, especially religion. It is possible to continue study at the University of Peradeniya for the spring term as well. All students in good academic standing are eligible to apply for the program. Preference is given to those students with a record of high achievement in courses focused upon Asian religions, history, philosophy, art, political science, sociology, and anthropology. Four to six Bowdoin students may participate each year, and four course credits are normally awarded. Interested students should consult with John C. Holt of the Department of Religion, or with Dean of the College Robert C. Wilhelm.

Legal Studies

Students considering the study of law should consult with Barbara S. Babkirk, Office of Career Services. Other members of the Legal Studies Advisory Group are Craig A. McEwen, Department of Sociology and Anthropology; Richard E. Morgan and Allen L. Springer, Department of Government and Legal Studies; and George S. Isaacson, Esq. They can advise students on the best ways to obtain coherence between a liberal arts program and the study of law and allied fields.

Bowdoin participates with Columbia University in an accelerated interdisciplinary program in legal education. Under the terms of this program, Bowdoin students may apply to begin the study of law after three years at Bowdoin. Students who successfully complete the requirements for the J.D. at Columbia also receive an A.B. from Bowdoin.

Murlo Summer Program

The Murlo Summer Program is designed to introduce interested students to both the practical and theoretical aspects of Etruscan archaeology. The seven-week program of fieldwork is carried out during the summer near Siena, Italy, at the Etruscan site of Poggio Civitate (ca. 650 B.C.). American students participate in the actual excavation of the material as well as in the documentation and conservation carried out in the storerooms. The work is conducted under the supervision of a professional staff of archaeologists, conservators, an architect, an illustrator, and a photographer.

On completion of the program, students may apply to the Recording Committee for one course credit, which will be considered on an individual basis.

Off-Campus Study

Bowdoin offers its students the opportunity to participate in a variety of programs sponsored by other institutions and organizations. Study away must be approved by the College's Recording Committee and the student's major department; requests must be submitted to the Registrar prior to the Friday before spring vacation of the year preceding attendance. Many specific programs and requirements for participation in them have been approved (see page 89 for information on Twelve College Exchange).

Foreign study: Students may apply for study in virtually any country. The Deans' Office has a list of over 125 programs which have been approved; students should consider these first. Information, including student evaluations, is also available from the Deans' Office. Students interested in the program of the Institute for European Studies should consult with the registrar. Bowdoin has an exchange program with the University of Dundee in Scotland.

Students who wish to study in French-, German-, Italian-, Russian-, or Spanish-speaking countries must have completed two years of language study or its equivalent. Exceptions may be made by the Recording Committee for programs that do not deal primarily with the language or literature of the country and for sophomores in the first year of language study who have discovered a serious vocation for the language. Some language study is encouraged for programs in countries with primary languages other than those but is not required. Deadlines for application to foreign programs vary; a student should consult with the dean well before the spring vacation of the year preceding anticipated participation.

Domestic study: Study at other institutions in the United States should be considered primarily as an extension of Bowdoin's academic program. Therefore, a student's academic motivation is the essential criterion for approval. Bowdoin has a number of defined exchange programs; to attend any institution not currently approved, a student must, after consultation with his or her adviser, present evidence that the study requested will be undertaken in at least a comparable academic environment. It is the student's responsibility to apply to Bowdoin and to the other institution for acceptance.

Approved programs include the City Semester at Boston University, Williams College—Mystic Seaport Program, the National Theater Institute, Washington Semester programs of American University and Boston University, Tougaloo College, SEA Semester at Woods Hole, and the Twelve College Exchange (see page 89). Forms for and information about these programs are available in the Deans' Office.

In all off-campus study programs, credit will be transferred only for grades of "C-minus" or better, and an official transcript must be submitted to Bowdoin's registrar.

Preengineering Programs

Through an arrangement with the School of Engineering and Applied Science of Columbia University and with the California Institute of Technology, qualified students may transfer into the third year of an engineering option after completing three years at Bowdoin. Admission is assured with the recommendation of the coordinator of the 3-2 programs. Then after the completion of two full years at the engineering school, a bachelor of arts degree is awarded by Bowdoin and a bachelor of science degree by the engineering school. The student should be aware that admission to these schools does not assure financial aid.

To fulfill the requirements of these programs, the student must start planning early. All students must take **Physics 103, 223, 227, 228, Chemistry 101, 102,** and **Mathematics 161, 171, 181,** and **Computer Science 100.** In addition, a student taking the physical sequence is expected to complete **Physics 300** and an additional course in mathematics, physics, chemistry, or computer science. For the chemical sequence, **Chemistry 251, 252** is expected. The student should also have at least ten semester courses outside of physics, mathematics, chemistry, and computer science. Economics is strongly suggested.

Students who wish to complete four years at Bowdoin may apply to Columbia for admission on a 4-2 program. Students who have honor grades in the sciences and are recommended by the coordinator are automatically admitted.

Students who wish to apply as regular transfer students into the junior year of any other engineering program must make the necessary arrangements themselves. Such students should apply to the Recording Committee for permission for study away. Upon the successful completion of the engineering program, a Bowdoin degree is awarded.

Because this program requires tight scheduling of courses, students should consult regularly with James H. Turner of the Department of Physics.

Teaching

Students interested in teaching in schools or graduate programs in education should discuss their plans with personnel in the Department of Education. The department maintains a register of those considering teaching careers. Since the normal advice will be that students include courses in psychology and education along with a major in a teaching field, they should make their interests known as early as possible.

Preparation for teaching is a continuous concern of an academic institu-

tion. The Committee on Teaching and Studies in Education expresses this concern. It coordinates the offerings of departments which are to be presented for public certification of teachers. It advises students and the faculty on needs in this field.

Twelve College Exchange

Bowdoin has joined with Amherst, Connecticut College, Dartmouth, Mount Holyoke, Smith, Trinity, Vassar, Wellesley, Wesleyan, Wheaton, and Williams to form the Twelve College Exchange program. Students from one college may apply to study for a year at one of the other colleges. About ten Bowdoin students will participate in the exchange during 1986-1987.

Bowdoin students wishing to participate in the exchange for the 1987-1988 academic year should make application to the office of the Dean of the College by January 23, 1987. Detailed information on the course offerings of the participating colleges is available from the Dean's Office. Application is normally made for two semesters. It is hoped that the exchange will afford a student the opportunity to take courses which are not offered on his or her own campus or to study specialized aspects of his or her major field of concentration with faculty members who have achieved preeminence in that specialty. Course work satisfactorily completed at any of the participating colleges will receive credit toward a degree at the student's "home" college.

Women's Studies

Courses on the role of women and opportunities for related independent study projects are offered in the Afro-American Studies Program and the Departments of English, Government, History, Romance Languages, Russian, and Sociology and Anthropology.

Courses listed for 1986-1987 and 1987-1988 include:

English 280. American Women Writers. Spring 1987.
Government 242. Racial and National Minorities, Women, and the State. Spring 1987.
History 11. Women in Britain and America, 1750-1920. Fall 1987.
History 246. Women in American History. Fall 1986.
History 248. Family and Community in American History. Fall 1986.
History 331. A History of Women's Voices in America. Spring 1988.
Russian 321. Topics Course. Fall 1988. **Women in Russian Society and Culture.**
Sociology 219. Sociology of Sex Roles. Fall 1986.
Sociology 310. Advanced Seminar on Women and Work. Spring 1987.

Additional information is available from the Dean of the College.

Courses of Instruction

Arrangement: The departments of instruction in the following descriptions of courses are listed in alphabetical order.

Time and Place of Classes: A schedule containing the time and place of meeting of all courses will be issued before each period of registration.

***Year Courses:** Courses marked with an asterisk are year courses and if elected must be continued for two consecutive semesters.

[Bracketed Courses]: All courses that cannot be scheduled for a definite semester are enclosed in brackets.

†**Foreign Studies Requirement:** Courses marked with a dagger will satisfy one semester of the foreign studies requirement.

Independent Study: See pages 81-82 for a description.

Prerequisites: Unless otherwise stated in the description, a course is open to all students.

Course Numbering: Courses are numbered according to the following system:

10-199 Freshman seminars and introductory courses
  10-49 Freshman seminars
  50-99 Courses intended for the non-major
  100-199 General introductory courses
200-289 General intermediate-level courses
290-299 Independent study at the intermediate level
300-399 Advanced courses including senior seminars and topics courses
400 Independent study and honors courses

Afro-American Studies

Administered by the Committee on Afro-American Studies

Associate Professor Bolles, *Program Director*

Requirements for the Major in Afro-American Studies: The major in Afro-American studies consists of four required core courses, a concentration of four additional courses, and a one-semester independent study project. The core courses, **Afro-American Studies 101, Sociology 208, History 261,** and **History 241** or **245** have been chosen to give the student a thorough background for the study of the black experience and to provide an introduction to the varied disciplines of Afro-American studies.

The four-course concentration is intended to bring the methodologies and insights of several disciplines to a single problem or theme. Suggested concentrations are: Race and Class in American Society, Cultures of the African Diaspora, Political Economy of Blacks in the Third World, and the coordinate major. Appropriate courses to be taken should be worked out by the student and the director of the Afro-American Studies Program. Alternatively, the student and the director may devise a concentration around another specific theme and submit a proposal to the Committee on Afro-American Studies for its approval. In addition, the independent study project, normally completed in the senior year, allows students to conduct research into a particular aspect of the black experience. Consult with the director concerning courses offered in previous years which may satisfy the program requirements.

Coordinate Major in Afro-American Studies: The purpose of the coordinate major is to encourage specialization in Afro-American studies within the framework of a recognized academic discipline. This major is, by nature, interdisciplinary, and strongly encourages independent study. The coordinate major entails completion of an ordinary departmental major in sociology and anthropology, history, economics, or government. The student is expected to take those courses within the major department which are cross-listed in the Afro-American Studies Program insofar as departmental major requirements permit. In addition, the student must take **Afro-American Studies 101** and four other courses outside the major department from a list approved annually by the Committee on Afro-American Studies. Students electing the coordinate major are required to carry out scholarly investigation of a topic relating to the Afro-American experience; not more than one of the elective courses may normally be an independent study course **(Afro-American Studies 290 or 400).**

†**101. African-American Cultures.** Fall 1986. Ms. Bolles.

An introduction to the study of African-American societies and peoples. Anthropological analysis of the different social formations of peoples of African descent in the New World. Selected case studies from the United States, Latin America, and the Caribbean. Examines such phenomena as New World slave systems, migration, the family, economics, and urbanization. (Same as **Anthropology 131.**)

†**208. Race and Ethnicity.** Fall 1986. Mr. Wilson.

The social and cultural meaning of race and ethnicity with special emphasis on the politics of events and processes in contemporary America. Analysis of the causes and consequences of prejudice and discrimination. Examination of the relationships between race and class. Comparisons between the status of racial and ethnic minorities in the United States and their status in other selected societies. (Same as **Sociology 208.**)

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

[†224. **Women in American Society: Implications of Race, Ethnicity, and Class.**]

[241. **The Civil Rights Movement.** (Same as **History 131.**)]

[244. **The Afro-American in American Society since Emancipation.**]

†245. **Afro-American Religion and Its Music: Redemption Songs.** Spring 1988. Mr. Stakeman.

By focusing on black religious music in the Americas, this course will consider how specific historical contexts have shaped and reflected the development of a distinctly Afro-American church, theology, and folk religion. The course will examine the different interactions of African and European cultures which have produced a variety of Afro-American cultures; the social role of the black minister; the social stratification of black Protestant denominations; the social roles within church services; the social welfare functions of churches; and black millenarianism. Topics will include slavery and the spiritual, the black peasantry and folk blues, urbanization and gospel music, Rastafarianism and reggae. (Same as **History 245.**)

[250. **Anthropology of Development.**]

[†255. **The Black Aesthetic.**]

†261. **An Introduction to Precolonial Africa.** Fall 1986. Mr. Stakeman.

Selected topics in the history of Africa before European colonization, including forms of African social and political organization, the economic bases of African societies, migration as a force in African history, the structure and dynamics of the great Sudanese empires (Ghana, Mali, Songhay), the trans-Saharan trade, the impact of the Zulu on South and East Africa, theories of state formation, the East African Coastal States, the Atlantic slave trade, the Islamic revolutions in West Africa, legitimate trade in Africa, and the prelude to colonialism.

(Same as **History 39.**)

290. **Intermediate Independent Study.**

400. **Advanced Independent Study and Honors.**

CROSS LISTINGS

Anthropology

[†132. **Latin American Societies.**]

[†206. **A Cross-Cultural Perspective on Families.**]

Economics

212. Labor and Human Resource Economics. Spring 1987. Mr. Gottschalk.
See Economics 212, page 120.
Prerequisite: Economics 101 and 102.

English

313. Langston Hughes and the Afro-American Literary Tradition. Fall 1986. Mr. Barksdale.
See English 313, page 135.

Government and Legal Studies

102. Caribbean Forms. Fall 1986. Mr. Potholm.
See Government and Legal Studies 102, page 145.
Class limit: 25.

†223. African Politics. Fall 1986. Mr. Potholm.
See Government and Legal Studies 223, page 146.

242. Racial and National Minorities, Women, and the State. Spring 1987. Mr. Rensenbrink.
See Government and Legal Studies 242, page 147.

History

Seminar 15. The Civil Rights Movement. Fall 1986. Mr. Levine.
See History Seminar 15, page 151.

Seminar 16. Slavery in the American South. Fall 1986. Mr. Lewallen.
See History Seminar 16, page 151.

†Seminar 18. Regional Conflict in Central America. Spring 1987. Ms. Jones.
See History Seminar 18, page 151.

244. The Afro-American in American Society since Emancipation. Spring 1988. Mr. Levine.
See History 244, page 156.

†255. Modern Latin American History. Spring 1987. Ms. Jones.
See History 255, page 157.

†261. Precolonial Africa: An Introduction to African History. Fall 1986. Mr. Stakeman.
See History 261, page 157.

†262. Colonialism in Africa. Spring 1987. Mr. Stakeman.
See **History 262**, page 158.

†264. Islam in Africa. Fall 1986. Mr. Stakeman.
See **History 264**, page 158.

361. The Afro-American Critique of America. Spring 1987. Mr. Stakeman.
See **History 361**, page 161.

Music

284. The American Musical Theater. Mr. Pepe.
See **Music 284**, page 175.

Sociology

11. The City: A Sociological Introduction. Fall 1986. Mr. Wilson.
See **Sociology 11**, pages 206-207.

151. Sociology of Health and Illness. Every fall. Ms. Bell.
See **Sociology 151**, page 207.
Prerequisite: Sophomore standing.

206. Urban Sociology. Spring 1988. Ms. Floge.
See **Sociology 206**, page 208.
Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

213. Social Stratification. Spring 1987. Mr. Rossides.
See **Sociology 213**, page 209.
Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

215. Criminology and Criminal Justice. Spring 1987. Mr. McEwen.
See **Sociology 215**, pages 209-210.
Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

217. World Population. Fall 1986. Ms. Floge.
See **Sociology 217**, page 210.
Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

218. Sociology of Law. Fall 1986. Mr. McEwen.
See **Sociology 218**, page 210.
Prerequisite: Previous course in sociology or anthropology or government.

Art

Professor Olds, *Chairman;* Associate Professor Lutchmansingh; Professor Cornell; Associate Professor Wethli, *Director, Studio Art Division;* Assistant Professors Docherty and Wegner; Visiting Assistant Professor Donahue; Lecturer McKee; Visiting Lecturer Glass

The Department of Art comprises two programs: Art History and Criticism, and Studio Art. Majors in the department are expected to elect one of these programs. The major in art history and criticism is devoted primarily to the historical and critical study of the visual arts as an embodiment of some of mankind's highest values and a record of the historical interplay of sensibility, thought, and society. The major in studio art is intended to encourage a sensitive and disciplined esthetic response to one's culture and personal experiences; it is designed to develop perceptual sensibility as well as creative visual thinking and formal skills in visual expression.

Requirements for the Major in Art History and Criticism: Nine courses, excluding independent study, are required: **Art 101; Art 202, 212,** or **226; Art 222, 232, 242,** and **252;** two of **Art 303** through **388;** and one other course. Among the remaining courses, the major is advised to include study in French and/or German, history, philosophy of art, Western religious thought, and the other arts (literature, music, theater, cinema).

Interdisciplinary Majors: The department participates in interdisciplinary programs in art history and archaeology, and art history and religion. See pages 164-165.

Requirements for the Minor in Art History and Criticism: The minor consists of five courses of which at least three must be at the 200 level and at least one at the 300 level.

The Major and the Minor in Studio Art are described on pages 101-104.

Courses in the History and Criticism of Art

10. Freshman Seminar.

10, 1. Caravaggio and His Contemporaries. Fall 1986. Ms. Wegner.

A study of the life and work of the painter Michelangelo Merisi da Caravaggio (1571/72-1610), whose dynamic, naturalistic style transformed European painting in the seventeenth century. Topics to be considered include the definition of naturalism and its place in seventeenth-century art theory; the social and religious context in which Caravaggio's revolutionary style was formed; interpretations of Caravaggio's paintings as reflections of his character; and the role of Caravaggio's patrons in shaping the course of his career. Readings will be drawn from translations of contemporary biographies, police records, and documents relating to the works, along with secondary texts by

Spear, Hibbard, Friedlander, and others. Oral presentations, a series of short papers, a midterm, and a final examination will be required.

No previous knowledge of the subject is assumed.

101. **Introduction to Western Art.** Fall 1986. Mr. Olds.

A chronological survey of the art of the Western world (Egypt, the Near East, Europe, and the European-based culture of North America), from the paleolithic period of prehistoric Europe to the present. Considers the historical context of art and its production, the role of the artist in society, style and the problems of stylistic tradition and innovation, and the major themes and symbols of Western art. Required of majors in Art History, majors in Studio Art, and minors in Art History. The prerequisite for most upper-level courses in the history of art.

†110. **Introduction to East Asian Art.** Spring 1987. Mr. Olds.

A chronological survey of Chinese, Korean, and Japanese art from prehistoric times to the present. Considers the painting, sculpture, and architecture of East Asia in the context of historical developments and the major religions of the Orient.

[150. **Principles of Design.**]

212. **Medieval Art.** Spring 1987. Mr. Olds.

Key monuments of medieval art and their respective cultures from the fall of Rome to the end of the Gothic period. The course begins with examples of early Christian art, continues with an examination of important works from the Byzantine, barbaric, and Carolingian periods, and ends with the periods of the Romanesque monasteries and Gothic cathedrals. Examples of the manuscript illuminations, ivory carvings, metalwork, tapestries, and stained glass windows for which the Middle Ages are noted are also considered.

Prerequisite: **Art 101** or consent of the instructor.

222. **Art of the Italian Renaissance.** Fall 1986. Ms. Wegner.

An approach to Renaissance Italian painting, sculpture, and architecture from the early fourteenth to the early sixteenth century, that is, from Giotto to Michelangelo, in their cultural contexts.

Prerequisite: **Art 1** or consent of the instructor.

226. **Northern European Art of the Fifteenth and Sixteenth Centuries.** Fall 1987. Mr. Olds.

A survey of the painting of the Netherlands, Germany, and France. The development of a naturalistic style in Flanders by Robert Campin, Jan van Eyck, and Roger van der Weyden, the spread of their influence over Northern Europe, the confrontation with the classical art of Italy occurring around 1500 in the work of Dürer and others, and the con-

tinuance of a native tradition in the work of Hieronymus Bosch and Pieter Bruegel the Elder will be major topics. The changing role of patronage and the rise of specialties such as landscape and portrait painting are discussed in reference to the works of individual artists.

Prerequisite: **Art 1** or consent of the instructor.

232. **Baroque Art.** Spring 1987. Ms. Wegner.

The art of seventeenth-century Europe. The naturalistic and classical revolution in painting carried out by Caravaggio, Annibale Carracci, and their followers in early seventeenth-century Rome and the development throughout Europe of these trends in the works of Rubens, Bernini, Georges de la Tour, Poussin, and others form one major theme of the course. The second is the rise of an independent school of painting in Holland. The development of Dutch landscape, still-life, genre, and portraiture is discussed in relation to artists such as Frans Hals, Jan van Goyen, Jacob van Ruysdael, and Jan Vermeer. The unique art of Rembrandt is studied in this context. Connections between art, religious ideas, and political conditions are stressed.

Prerequisite: **Art 101** or consent of the instructor.

242. **European Art of the Nineteenth Century.** Fall 1986. Ms. Docherty.

The development of European art in the nineteenth century, with emphasis on France, Germany, and Britain, studied primarily in terms of the artistic movements that dominated the century: neoclassicism, romanticism, realism, Impressionism, Post-Impressionism, and symbolism; the art-criticism of Ruskin and Baudelaire; the changing relationship of art and artists to society; and the late nineteenth-century sources of modernism and the avant-garde.

Prerequisite: **Art 101** or consent of the instructor.

252. **Modern Art.** Every fall. Fall 1986. Mr. Lutchmansingh.

A study of the rise and development of the Modernist movement in visual art in Europe and the Americas, beginning with the major figures of Post-Impressionism and examining in succession Expressionism, Fauvism, Cubism, Futurism, Constructivism, Dada, Surrealism, the American affinities of these movements, the Mexican muralists, and the Canadian Group of Seven. A theoretical ground for this study will be the definition of "modernism" and the problems presented by its social situation, its relation to other elements of culture, its place in the historical tradition of Western art, and its invocation of archaic, primitive, and Oriental cultures.

Prerequisite: **Art 101, 242,** or consent of the instructor.

254. **Contemporary Art.** Every spring. Spring 1987. Mr. Lutchmansingh.

A study of the art of Europe and the Americas since World War II,

with emphasis given to the New York School. An introductory overview of Modernism will be followed by a more detailed examination in turn of Abstract Expressionism and the Minimalist developments which it partly inspired, Pop, Optical, Kinetic, Conceptual, and Environmental art, European abstraction, and the resurgence of various forms of figuration. The course will conclude with an examination of the international consequences of Modernist and contemporary developments, the impact of new electronic and technological media, and the critical debate surrounding the subject of Postmodernism and its historical attitude.

Prerequisite: **Art 100, 252,** or consent of the instructor.

262. **American Art from Colonial Times to the Civil War.** Fall 1986. Ms. Docherty.

American architecture, sculpture, and painting are studied from their beginnings in colonial times to their development into a national art in the nineteenth century with the growth and expansion of the country. The major movements of neoclassicism, romanticism, and realism are examined in connection with their historical backgrounds. Special attention is devoted to such masters as Feke, Copley, Stuart, West, Peale, Audubon, Catlin, and Inness in painting, and Charles Bulfinch, Thomas Jefferson, and James Renwick in architecture.

264. **American Art from the Civil War to the Present Day.** Spring 1987. The Department.

A continuation of **Art 262.** Stress placed on architecture through Richardson and the American tradition in painting and sculpture in the late nineteenth and twentieth centuries. Homer, Eakins, Ryder, Sargent, Whistler, Sloan, Wyeth, and other outstanding and representative artists of the period are included.

Prerequisite: **Art 101** or consent of the instructor.

[282. **Modern Architecture.**] Fall 1987. The Department.

288. **Original Works of Art.** Spring 1987. Ms. Watson.

The course balances the practical, historical, and theoretical aspects of the museum field and is divided into three parts: study of original works of art from the collections of the Bowdoin College Museum of Art, including analytical discussions of technique, condition, attribution, quality, commission and ownership history, iconography, market value, and acquisition and exhibition process; review of the history of collecting in the West as introduction to lectures on collecting in America and relevance of the College's first major donor of art, James Bowdoin III; and discussion of the art market today, and the policies and procedures of individual and institutional collecting.

Prerequisite: **Art 101.** Enrollment limited to twelve.

Seminars in Art History and Criticism

The seminars are intended to utilize the scholarly interests of members of the department and provide an opportunity for advanced work for selected students who have successfully completed enough of the regular courses to possess a background. Admittance to all seminars requires consent of the instructor. The department does not expect to give all, or in some cases any, seminars in each semester. As the seminars are varied, a given topic may be offered only once, or its form changed considerably from time to time.

326. Studies in Northern Renaissance Art: Pieter Brueghel. Fall 1986. Mr. Olds.

The art of Pieter Brueghel the Elder in the general context of sixteenth-century European painting, but focusing specifically on Brueghel's landscape paintings, his allegories and satires, and his position as a "social realist." Readings in sixteenth-century literature and modern scholarship provide a foundation for an understanding of Brueghel's achievements and his influence on European art. Among the works of art to be examined is an original Brueghel drawing in Bowdoin's collection.

Prerequisite: **Art 226** or consent of the instructor.

328. Visions, Dreams, and Ecstasies in Renaissance and Baroque Art. Spring 1987. Ms. Wegner.

A study of artists' attempts to represent or evoke visionary or ecstatic experience in painting and sculpture from 1400 to 1750. Topics to be considered include the problem of the relationship between mystical writings and subsequent attempts to depict visionary episodes in art; the invention of new spatial illusions, lighting effects, or compositional structures intended to express intense spiritual experience; miraculous images that have inspired visions or ecstasies; and the role of the dream or vision in artistic inspiration. Readings will be drawn from the writings of Christian mystics including St. Bridget of Sweden, St. Teresa of Ávila, and St. John of the Cross, along with secondary texts by Emile Mâle, Irving Lavin, Howard Hibbard, and others.

Prerequisite: **Art 101** or consent of the instructor.

342. Symbolism and Art Nouveau. Fall 1986. Mr. Lutchmansingh.

These two late nineteenth-century European developments in the fine and decorative arts will be examined as alternatives to and complements of avant-garde Impressionism and Post-Impressionism. Emphasis will be given to the following: Moreau, Redon, Gauguin and the Pont-Aven School, and the Nabis in France; Rossetti and late Pre-Raphaelitism, Watts, and Burne-Jones in England; Böcklin and Hodler in Central Europe; and the Glasgow and Belgian traditions of Art

Nouveau. The seminar will conclude with an inquiry into the literary affinities of Symbolist visual art in such writers as Poe, Baudelaire, Mallarmé, Huysmans, Swinburne, and Wilde, and into the cultural criticism which equated some of these developments with "decadence" and "degeneracy."

Prerequisites: **Art 242** or consent of the instructor.

364. **Studies in American Art: Image and Idea in American Culture.** Spring 1987. Ms. Docherty.

This course will explore the complex and multifaceted relationship between painting and writing in the history of American art. We will begin by considering the different expressive possibilities of these media and then proceed to examine various ways in which the two have interacted over time. Aspects of the problem to be considered will include: the treatment of common subjects (i.e., the American landscape, the national character, the industrial city); the influence of literature on American painters; picture-text relationships in magazine and book illustration; and art criticism as a means of bridging the gap between eye and mind. Contemporary scholarship on the subject of American art and literature will also be read and discussed.

Prerequisite: **Art 101** and consent of the instructor.

382. **Theory and Interpretation of Art.** Spring 1987. Mr. Lutchmansingh.

An examination of some contemporary developments in the aesthetics and interpretation of the visual arts, and of their place in the humanistic disciplines and so-called human sciences. Four broad approaches will be emphasized: Psychoanalytic, Marxist, Feminist, and Post-Structuralist. For each of these, an introductory study of important texts will be followed, first, by such more specific considerations as the nature of visual imagery, the function of the spectator, the artist's biography, the language of criticism and the conceptual apparatus of artistic analysis, the relationship of art and literature, and the problems of "contextualization" (into society, psychology, history, etc.), and second, by close study of particular examples of artistic creation, biography, and scholarly interpretation.

Prerequisite: **Art 101** and at least one other course at the 200 level.

384. **Critical Perspectives: Viewing and Re-Viewing the Performing Arts.** Spring 1987. Ms. Vail.

This seminar will explore the processes of literate viewing and writing in the field of the performing arts, particularly dance. Students will view films and videos and attend live performances. Through reading and writing they will gain theoretical understanding and practical experience of interpretation and commentary. A principal objective of the course is to consider alternative interpretive paradigms, demonstrating

that issues of style pervade the processes of perceiving and reporting the arts just as they permeate the activities of creating and performing.

290. Intermediate Independent Study. The Department.

400. Advanced Independent Study and Honors. The Department.

Studio Art

Requirements for the Major in Studio Art: Eleven courses are required in the department, to include **Art 160, 161, 270,** and **271;** four other courses in the studio division, at least one of which must be numbered 273 or higher; and **Art 100, 242,** and **252.** Students undertaking an honors project in their senior year will be required to take **Art 400** in addition to the eleven courses required of the major. Majors are also strongly advised to include study of history, philosophy, religion, literature, and music among their remaining courses.

Requirements for the Minor in Studio Art: Art 100, 160, 161, either **270** or **271,** plus two additional studio courses, at least one of which must be numbered 273 or higher.

Students wishing to pursue a joint major in studio art and some other subject are required to take at least six courses in the division, selected to complement the other major.

A comprehensive portfolio is expected of all students contemplating professional work in the visual arts. Recommended for students anticipating careers or graduate education in architecture: **Physics 103, Chemistry 101, 102, Geology 101,** and mathematics courses; in education: **Psychology 250** and **262,** and **Education 100, 110,** and **200;** in film and visual communication: **English 50, 51,** and **53;** in graphic design and computer graphics: **Computer Science 100.**

Studio courses without prerequisite are frequently oversubscribed. In such cases, preference in enrollment is given to freshmen and sophomores as well as to upperclass students fulfilling requirements of the studio major or minor.

[159. Visual Thinking.]

160. Drawing I. Fall 1986. Mr. Wethli. Spring 1987. Mr. Donahue.

An introduction to drawing, with an emphasis on the development of perceptual, organizational, and critical abilities. Studio projects will entail objective observation and analysis of still life, landscape, and figurative subjects, exploration of the abstract formal organization of graphic expression, and the development of a critical vocabulary of visual principles. Lectures and group critiques augment studio projects in various drawing media.

Enrollment limited to 25 students.

161. Painting I. Fall 1986. Mr. Donahue. Spring 1987. Mr. Wethli.

An introduction to painting, with an emphasis on the development of perceptual, organizational, and critical abilities. Studio projects will entail objective observation and analysis of still life, landscape, and figurative subjects, exploration of the painting medium and chromatic structure in representation, and the development of a critical vocabulary of painting issues. Lectures and group critiques augment studio projects in painting media.

Enrollment limited to 25 students.

263. Printmaking I. Fall 1986. Mr. Wethli.

An introduction to intaglio printmaking, including etching, drypoint, engraving, monotype, and related methods. Studio projects develop creative approaches to perceptual experience and visual expression that are uniquely inspired by the intaglio medium. Attention is also given to historical and contemporary examples and uses of the medium.

Enrollment limited to 20 students.

Prerequisite: **Art 160** or consent of instructor.

265. Photography I. Spring 1987. Mr. McKee.

Photographic visualization and composition as consequences of fundamental techniques of black-and-white still photography. Class discussions and demonstrations, examination of masterworks, field and laboratory work in 35mm format. Students must provide their own 35mm nonautomatic camera.

Enrollment limited to 32 students.

267. Architectural Design I. Spring 1988. Mr. Glass.

An introduction to architectural design. Studio projects develop skills in program and context analysis, conceptual design principles and processes, and presentation techniques.

Enrollment limited to 25 students.

[**269. Sculpture I.**]

270. Drawing II. Spring 1987. Mr. Wethli.

A continuation of the principles introduced in **Art 160,** with particular emphasis on figurative drawing. Studio projects develop perceptual, creative, and critical abilities through problems involving objective observation, gestural expression and structural principles of the human form, studies from historical and contemporary examples, and exploration of the abstract formal elements of drawing. Lectures and group critiques augment studio projects in various drawing media.

Prerequisite: **Art 160.**

271. **Painting II.** Spring 1987. Mr. Donahue.
A continuation of the principles introduced in **Art 161,** with studio problems based on direct experience.
Prerequisite: **Art 161.**

273. **Printmaking II.** Spring 1987. Mr. Cornell.
Further exploration of intaglio printmaking and monotype.
Prerequisite: **Art 263** or consent of instructor.

275. **Photography II.** Fall 1986. Mr. McKee.
Review of conceptual and technical fundamentals of black-and-white photography and exploration of the different image-making possibilities inherent in related photographic media like 35mm and view cameras. Seminar discussions and field and laboratory work. Students must provide their own nonautomatic 35mm camera.
Prerequisite: **Art 265** or consent of the instructor.

277. **Architectural Design II.** Spring 1987. Mr. Glass.
A continuation of **Art 267.** Emphasis on the architectural design process as the integration of structural, functional, environmental, and cultural considerations through a series of studio projects based on actual conditions.
Prerequisite: **Art 267** or consent of instructor.

[279. **Sculpture II.**]

380. **Drawing III.** Fall 1986. Mr. Donahue.
A continuation of the principles explored in **Art 270,** with particular emphasis on protracted drawings. Lectures, group critiques, and written assignments augment the studio portion of the class.
Prerequisite: **Art 270** or consent of instructor.

381. **Painting III.** Spring 1987. Mr. Cornell.
A continuation of **Art 271.**
Prerequisite: **Art 271** or consent of instructor.

383. **Printmaking III.** Spring 1987. Mr. Cornell.
A continuation of **Art 273.**
Prerequisite: **Art 273** or consent of instructor.

[389. **Creativity.**]

390. **Drawing IV.** Fall 1986. Mr. Donahue.
Advanced projects in drawing.
Prerequisite: **Art 380** or consent of instructor.

391. **Painting IV.** Spring 1987. Mr. Cornell.
A continuation of **Art 381.**
Prerequisite: **Art 381** or consent of instructor.

290. **Intermediate Independent Study.** The Department.

400. **Advanced Independent Study and Honors.** The Department.
Open only to exceptionally qualified senior majors and required for honors credit. Advanced studio projects undertaken on an independent basis, with assigned readings, critical discussions, and a final position paper.

Biochemistry

Administered by the Committee on Biochemistry

Professor Howland, *Chairman*

Requirements for the Major in Biochemistry: All majors must offer the following courses: **Biology 101, Biology (Chemistry) 261, 262; Chemistry 101, 102, 225, 226, 251; Mathematics 161, 171;** and **Physics 103.** In addition, majors must offer four courses from the following: **Biology 113, 114, 116, 201, 202, 204, 211, 212, 302, 304, 400; Chemistry 210, 252, 270, 330, 400; Physics 223, 227, 228, 260, 400.** Students may include as electives up to two 400 courses. They may petition the Committee on Biochemistry to be allowed to substitute other science courses as electives. Finally, a student intending to carry out a laboratory Independent Study course in Biochemistry should first take **Chemistry 210, Biology 211,** or **Biology 212.** Students offering Independent Study courses for the Biochemistry major should register for **Biochemistry 401, 402,** etc.

Biology

Professor Howland, *Chairman;* Associate Professor Steinhart;
Assistant Professors Dickinson, Phillips, and Wheelwright;
Teaching Fellows Bryer, Cahill, Garfield, and Wine
Joint Appointment with Chemistry: Associate Professor Settlemire

Requirements for the Major in Biology: The major consists of seven semester courses in the department exclusive of courses in the 400 series. Major students are required to complete five core courses including **Biology 101** and **102** and three of the following: **Biology 113, 114, 115,** and **116.** Majors are also required to complete two other courses within the department as well as **Mathematics 161, Physics 103,** and **Chemistry 225** and are advised to complete **Biology 101** and **102** and the mathematics, physics, and chemistry

courses by the end of the sophomore year. Students planning postgraduate education in science or in the health professions should note that graduate and professional schools are likely to have additional admissions requirements in mathematics, physics, and chemistry.

Interdisciplinary Major: The department participates in interdisciplinary programs in biochemistry and psychobiology. See pages 104 and 187-188.

Requirements for the Minor in Biology: The minor consists of **Biology 101** and **102,** plus two other courses appropriate to the major.

51. The History of Science. Spring 1988. Mr. Howland.

An introduction to the history of science with emphasis on biology and medicine. The course will concentrate on the classical period (both European and Chinese) through the Renaissance and will consider the connections between scientific activity and features of the wider society. This course may not be counted toward the major in biology or biochemistry.

Prerequisite: A course in European history.

101. Introductory Cell Biology. Every fall. The Department.

Examination of fundamental biological phenomena with special reference to cells. Topics include ultrastructure, cell growth, membrane transport, and the interaction between viruses and host cells. Lectures and three hours of laboratory work each week. Understanding of high school chemistry is assumed.

102. Biology of Organisms and Populations. Every spring. The Department.

A study of the properties of organisms and populations with evolution as a central, unifying theme. Topics include the origin of life; the mechanisms of evolution; a survey of the kingdoms of living organisms; the physiology, morphology, and development of animals and plants; and the effects of the environment on populations. Lectures and three hours of laboratory work each week.

Prerequisite: **Biology 101.**

113. Genetics. Every fall. Mr. Steinhart.

Integrated coverage of organismic and molecular levels of the genetics of eucaryotes and procaryotes. Topics include the structure and function of chromosomes, the mechanisms and control of gene expression, recombination, mutagenesis, and the determination of gene order and sequence. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 211.**

Prerequisite: **Biology 102.**

114. Comparative Physiology. Every spring. Ms. Dickinson.

The relationship between structure and function in organ systems and in invertebrates and vertebrates as a whole. The interdependency of

organ systems considered. Lectures and three hours of laboratory work or conferences each week.

Prerequisite: **Biology 102.**

115. Ecology. Every fall. Mr. Wheelwright.

Principles concerning the interactions between organisms and their environment. Topics include population growth and structure, processes of speciation, succession, energy flow, biogeochemical cycling, and the influence of competition, predation, and other factors on population size and distribution. Laboratory sessions, field trips, and group research projects will emphasize developing a familiarity with the natural history of local plants and animals (both marine and terrestrial) and understanding their interactions. The course will include one weekend field trip.

Prerequisite: **Biology 102** or consent of the instructor.

116. Developmental Biology. Every spring. Mr. Phillips.

An examination of current concepts of embryonic development with emphasis on their experimental basis. Topics include morphogenesis and functional differentiation, tissue interaction, nucleocytoplasmic interaction, differential gene expression, and interaction of cells with hormones and extracellular matrix. Project-oriented laboratory work emphasizes experimental methods. Lectures and three hours of laboratory each week.

Prerequisite: **Biology 102.**

151. Ethology. Fall 1987. Ms. Dickinson.

Animal behavior and its evolution. Topics include genetics and ontogeny of behavior, territoriality, dominance, social organization, "altruism," sexual selection, and animal communication. Lectures and three hours of laboratory or field work.

Prerequisite: A previous college-level science course or consent of the instructor.

152. Biology of Plants. Spring 1988. Mr. Steinhart.

Emphasis on the physiology of plants. Topics include the nature and control of growth and differentiation, water and nutrient translocation, metabolism, hormone physiology, and ecology of plants. Laboratory work stresses association of structure and function in tissues and organs of higher plants and includes an introduction to field botany. Lectures and three hours of laboratory work each week.

Prerequisite. **Biology 102.**

154. Ornithology. Spring 1987. Mr. Wheelwright.

A study of all areas of the biology of birds, including anatomy, physiology, distribution, and classification, with an emphasis on avian

ecology and evolution. Through integrated laboratory sessions, field trips, and an independent research project, students will learn identification of birds, functional morphology, and research techniques such as experimental design, behavioral observation, and banding.

Prerequisite: **Biology 102** and/or **115,** or consent of the instructor.

201. Microbiology. Every fall. Mr. Settlemire.

An examination of the structure and function of microorganisms, primarily bacteria, with a major emphasis on molecular descriptions. Subjects covered include structure, metabolism, mechanism of action of antibiotics, basic virology. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 211.**

Prerequisite: **Biology 102** and **Chemistry 225.**

202. Immunology. Spring 1987. Mr. Settlemire.

Covers the development of the immune response, the cellular physiology of the immune system, the nature of antigens, antibodies, B and T cells, and the complement system. The nature of natural immunity, transplantation immunology and tumor immunology also considered. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 212.**

Prerequisite: **Biology 102.**

203. Comparative Neurobiology. Fall 1986. Ms. Dickinson.

A comparative study of the function of the nervous system in invertebrate and vertebrate animals. Topics include the physiology of individual nerve cells and their organization into larger functional units, the behavioral responses of animals to cues from the environment, and the neural mechanisms underlying such behaviors. Lectures and three hours of laboratory work each week.

Prerequisite: **Biology 102. Biology 114** is recommended.

204. Biochemical Endocrinology. Spring 1988. Mr. Settlemire.

A study of how the endocrine system is involved in the regulation of metabolism and development with an emphasis on the biochemical mechanisms. The processes involved in the production and release of the hormones also examined. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 212.**

Prerequisite: **Biology 261.**

208. Experimental Design and Statistical Analysis for Environmental Scientists. Spring 1987. Mr. Gilfillan.

See **Environmental Studies 202,** pages 136-137.

210. Marine Ecology. Spring 1987. Mr. Gilfillan.

See **Environmental Studies 200,** page 136.

211. Laboratory in Microbiology and Genetics. Every fall. Messrs. Steinhart and Settlemire.

Lectures and laboratories to include experimental design, identification and culturing of eucaryotic and procaryotic cells, the principles of light and electron microscopy, radioisotopes, immunochemistry, cytogenetics, and recombinant DNA technology. One to two hours of lecture and three to six hours of laboratory each week. Microbiology and genetics students contemplating postgraduate studies in biological science are strongly encouraged to enroll in the laboratory course.

Prerequisite: Concurrent enrollment in either **Biology 113** or **201.**

212. Laboratory in Molecular Biology and Biochemistry. Every spring. Messrs. Howland and Settlemire.

Experiments employing contemporary techniques in molecular biology and biochemistry. Emphasis placed on isolation and physical properties of nucleic acids, isolation and kinetics of enzymes, and composition and activities of biological membranes. Techniques studied and used include radioisotopes, spectrophotometry, electrophoresis, chromatography, scanning electron microscopy, and the use of microcomputers. This course is a logical precursor to independent study in the areas of molecular biology and biochemistry.

Prerequisite: Two from **Biology 113, 201, 261, 262.**

261. Biochemistry I. Every fall. Mr. Howland.

Proteins and enzymes. An introduction to the chemistry and biology of small biological molecules, macromolecules, and membranes. Emphasis will be placed upon kinetics and mechanisms of enzymic reactions and upon equilibrium and non-equilibrium thermodynamics underlying biological processes.

Prerequisite: **Chemistry 226.**

262. Biochemistry II. Every spring. Mr. Page.

See **Chemistry 262,** page 111.

302. Virology. Spring 1988. Mr. Steinhart.

A study of plant and animal viruses beginning with lectures on fundamental virology and followed by student-led seminars based on the primary literature. The course covers taxonomy, structure, replication, pathogenesis, and epidemiological aspects of viruses.

Prerequisite: **Biology 113** or **201.**

303. Advanced Developmental Biology. Fall 1986. Mr. Phillips.

The study of the principles and processes of embryonic and postembryonic animal development, stressing mechanisms of cell and tissue interaction, morphogenesis, and regulation of gene expression. Lectures

presented on model systems. Students read original journal articles and present papers in the form of seminars. Laboratory projects.

Prerequisite: **Biology 116.**

304. **Topics in Biochemistry and Molecular Biology.**

A seminar that will deal, at different times, with such topics as biological energetics, membrane biochemistry, medical genetics, the molecular biology of development, and plant molecular biology.

Spring 1987. **Membrane Biology.** Mr. Howland.

A seminar dealing with the structure and function of biological membranes, with emphasis on energy transfer, ionic transport, and regulatory mechanisms.

Prerequisite: Either **Biology 114** or **261.**

400. **Independent Study and Honors.** The Department.

Chemistry

Professor Page, *Chairman;* Professors Butcher and Mayo; Associate Professors Christensen and Nagle; Assistant Professor Trumper; Visiting Instructor Doan; Research Associate Bennett; Director of Laboratories Foster; Teaching Fellows Bernier, Fickett, Glass, and Hotham;

Joint Appointment with Biology: Associate Professor Settlemire

Courses are numbered to follow a general format. Courses in the 50 level are introductory, do not have prerequisites, and are appropriate for nonmajors. Courses at the 100 level are introductory without a formal prerequisite and lead to advanced-level work in the department. Courses 200 through 259 are at the second level of work and generally require only the introductory course as a prerequisite. Courses 260 through 290 are normally taken in the junior year and have two or more courses as prerequisites. Courses 300 through 390 normally are taken in the junior or senior year and have two or more courses as prerequisites.

Requirements for the Major in Chemistry: The required courses are **Chemistry 101, 102, 210, 225, 226, 251, 252, 254,** three advanced courses approved by the department, and **Physics 103.** Because the department offers programs based on the interests of the student, a prospective major is encouraged to discuss his or her plans with the department as early as possible. Students, faculty members, and outside speakers lead seminars sponsored by the department and the student affiliate chapter of the American Chemical Society.

Independent Study: A student wishing to conduct a laboratory independent study project **(Chemistry 400)** must have taken at least one of the following courses: **Chemistry 210, Biology 211,** or **Biology 212.**

Interdisciplinary Major: The department participates in interdisciplinary programs in biochemistry and chemical physics. See pages 104 and 165.

Requirements for the Minor in Chemistry: The minor consists of **Chemistry 101** and **102,** plus three other chemistry courses appropriate to the major.

[50. Topics in Chemistry.]

101. Introductory Chemistry I. Every fall. Mr. Christensen and the Department.

An introduction to chemistry, including chemical stoichiometry; the properties of gases, solids, and liquids; acids and bases; ionic and nonionic equilibrium; and oxidation-reduction. Lectures, conferences, and three hours of laboratory a week.

102. Introductory Chemistry II. Every spring. Mr. Butcher and the Department.

Fundamental topics in inorganic and physical chemistry. Elementary thermodynamics, chemical kinetics, and several approaches to chemical bonding are discussed, as are the periodic properties of the elements and topics in descriptive inorganic chemistry. Lectures, conferences, and three hours of laboratory a week.

Prerequisite: **Chemistry 101** or consent of the instructor.

210. Fundamentals of Inorganic and Analytical Chemistry. Fall 1986. Mr. Butcher.

Quantitative chemical analysis of inorganic substances. The laboratory includes several instrumental analysis experiments in addition to more traditional ones. Lectures, conference, and four hours of laboratory work a week. The department recommends that **Chemistry 210** be taken concurrently with **Chemistry 225** by all students planning to major in chemistry.

Prerequisite: **Chemistry 102.**

225. Elementary Organic Chemistry. Every fall. Mr. Page.

An introduction to the chemistry of the compounds of carbon. The foundation for further work in organic chemistry and biochemistry. Lectures, conference, and four hours of laboratory work a week.

Prerequisite: **Chemistry 102.**

226. Organic Chemistry. Every spring. Mr. Trumper.

A continuation of the study of the compounds of carbon. **Chemistry 225** and **226** cover the material of the usual course in organic chemistry and form a foundation for further work in organic chemistry and biochemistry. Lectures, conference, and four hours of laboratory work a week.

Prerequisite: **Chemistry 225.**

[230. Intermediate Topics in Chemistry.]

[231. Chemical Ecology.]

251. **Physical Chemistry I.** Every fall. Mr. Butcher.
Thermodynamics and its application to chemical changes and equilibria that occur in the gaseous, solid, and liquid states. Macroscopic behavior of chemical systems is related to molecular properties by means of the kinetic theory of gases and statistical mechanics. Also included is the study of chemical kinetics.
Prerequisite: **Chemistry 102, Physics 103, Mathematics 171,** or consent of the instructor. **Mathematics 181** recommended.

252. **Physical Chemistry II.** Every spring. Mr. Christensen.
Development and principles of quantum mechanics with applications to atomic structure, chemical bonding, chemical reactivity, and molecular spectroscopy.
Prerequisite: **Chemistry 251** or consent of the instructor. **Mathematics 181** recommended.

254. **Physical Chemistry Laboratory.** Every spring. Mr. Christensen.
Experiments on thermodynamics, kinetics, and spectroscopy. One to two hours of lecture and three to six hours of laboratory per week.
Prerequisite: **Chemistry 251, 252** (generally taken concurrently).

261. **Biochemistry I.** Every fall. Mr. Howland.
See **Biology 261,** page 108.

262. **Biochemistry II.** Every spring. Mr. Page.
An introduction to metabolism. Topics will include pathways in living cells by which energy is conserved, pathways by which important biological molecules are synthesized, and the bioorganic chemistry of nucleic acid and protein synthesis.
Prerequisite: **Chemistry 261.**

270. **Molecular Structure Determination in Organic Chemistry.** Fall 1986. Mr. Trumper.
Application of infrared, Raman, ultraviolet, nuclear magnetic resonance, and mass spectrometry to the structural elucidation of complex organic systems. Lectures and three hours of laboratory work a week.
Prerequisite: **Chemistry 226** or consent of the instructor.

[280. Advanced Analytical Chemistry: Computer Interfacing.]

310. **Inorganic Chemistry.** Every fall. Mr. Doan.
The structures, properties, reaction mechanisms, and syntheses of

inorganic compounds. Lectures and three hours of laboratory work a week.

Prerequisite: **Chemistry 251** and **252,** or consent of the instructor.

320. **Advanced Organic Chemistry.** Fall 1986. Mr. Trumper.

The study of the physical organic chemistry of synthetic organic reactions. Topics discussed include: stereochemistry, conformational analysis, molecular orbital theory, carbanion chemistry, cycloaddition reactions, and concerted intramolecular rearrangements. Applications to the synthesis of natural products and ethical pharmaceuticals will be emphasized. Students will learn to read articles of interest in the current chemical literature.

Prerequisite: **Chemistry 226.**

[330. **Advanced Topics in Chemistry.**]

[331. **Atmospheric Chemistry.**]

[332. **Photochemistry of Metal Coordination Compounds: Light, Electrons, and Energy Transformation.**]

[350. **Advanced Physical Chemistry.**]

290. **Intermediate Independent Study.** The Department.

400. **Advanced Independent Study and Honors.** The Department.

For students intending to conduct a laboratory research project, either **Chemistry 210, Biology 211,** or **Biology 212** is required.

Classics

Professor Ambrose, *Chairman;* Associate Professor Boyd; Assistant Professor Rhodes; Visiting Assistant Professor Pavlock; Visiting Lecturer Lutz

The Department of Classics offers two major programs, one with a focus on language and literature (Classics), and one with a focus on classical archaeology (Classics/Archaeology). The nature of classical studies is interdisciplinary, and students pursuing majors in both programs are encouraged to study all aspects of ancient civilization: language and literature, history, religion, philosophy, art and architecture, technology and science, politics, and daily life. This is reflected in the requirements for the two major programs: for each, requirements in Greek and/or Latin and in classical archaeology must be fulfilled.

Requirements for the Major in Classics: The major in classics consists of nine courses. At least six of the nine courses are to be chosen from offerings

in Greek and Latin and should include at least two courses in Greek or Latin at the 300 level; one of the remaining courses should be **Archaeology 101** or **102.** Students concentrating in one of the languages are encouraged to take at least two courses in the other. **Classics 51** and **52** may not normally be counted towards the major.

Requirements for the Major in Classics/Archaeology: The major in classics/archaeology consists of ten courses. At least five of the ten courses are to be chosen from offerings in archaeology, and should include **Archaeology 101** and **102;** and at least four of the remaining courses are to be chosen from offerings in Greek and Latin, and should include at least one at the 300 level. **Classics 51** and **52** may not normally be counted towards the major.

Interdisciplinary Major: The department participates in an interdisciplinary program in archaeology and art history. See page 164.

Requirements for the Minor: Students may choose a minor in one of four areas: Greek, Latin, classics, or archaeology. The minor in Greek consists of four courses in the Greek language. The minor in Latin consists of four courses in the Latin language. The minor in classics consists of four courses in Greek and Latin, including **Greek 204** or **Latin 205.** The minor in archaeology consists of four archaeology courses, including **Archaeology 101.**

Several opportunities for study abroad in the junior year exist for students majoring in classics programs, including the Intercollegiate Center for Classical Studies in Rome, of which Bowdoin is a participating member (see pages 85-86). Consult members of the department for further information on this and other programs.

Archaeology

101. Italian Archaeology. Every fall. Mr. Rhodes.

An introduction to the cultures of Italy through their physical remains. Traces the development of civilization in Italy from the early Iron Age through the Roman emperor Constantine. Particular emphasis on Etruscan and Roman architecture, sculpture, and painting.

102. Greek Archaeology. Every spring. Mr. Rhodes.

An introduction to the cultures of Greece through their physical remains. Traces the development of civilization in the Aegean and on mainland Greece from the Minoan-Mycenaean era through the Classical period. Particular emphasis on architecture, sculpture, painting, and pottery.

[103. Greek Archaeology: The Minoan-Mycenaean Civilization.]

301. Greek Painted Pottery. Fall 1986. Mr. Rhodes.

Traces the development of the shape and decoration of Greek pottery from the Geometric period through the end of the Classical era. The

characteristics of individual artists and the treatment of various Greek myths in different periods are studied.

Prerequisite: **Archaeology 102** or consent of the instructor.

302. **Greek Architecture.** Spring 1987. Mr. Rhodes.

Traces the development of Greek architecture from the Geometric period through the Hellenistic period. The course is not limited to the development of the temple, but also considers private and public buildings. Among the aspects considered are city planning, religious sanctuaries, and temples.

Prerequisite: **Archaeology 102** or consent of the instructor.

303. **Greek Sculpture.** Fall 1987. Mr. Rhodes.

Traces the development of monumental sculpture in the Archaic and Classical period in Greece. Focuses on freestanding sculpture as well as the development of architectural sculpture, in particular pedimental and frieze decoration. Consideration is given to stylistic analysis, sculptural technique, dating, and the relationship among sculptor, architect, and painter.

Prerequisite: **Archaeology 102** or consent of the instructor.

[304. **The Etruscans.**]

305. **Etruscan and Roman Architecture.** Spring 1988. Mr. Rhodes.

Traces the development of Etruscan and Roman architecture from the sixth century B.C. through the Roman emperor Constantine. Particular emphasis on the evolution of specific building types, private and public, and on the evolution of the Roman concept of architectural space.

Prerequisite: **Archaeology 101** or consent of instructor.

[391, 392. **Special Topics.**]

Classics

51. **Classical Mythology.** Spring 1987. Ms. Pavlock.

Focuses on the mythology of the Greeks and includes an intensive study of the myths themselves. Other subjects considered are recurrent patterns in Greek myths, the application of modern sociological and psychological theories to the study of myth, ancient creation myths, and the relation of mythology to religion. Concludes with an examination of the use of myths in ancient literature. Course limited to seventy-five students.

52. **Greek Literature in Translation.** Spring 1988. Mr. Ambrose.

An introduction to the important works of Greek literature in English translation. The objective of the course is not only to provide an understanding and appreciation of the literary achievements of the

Greeks, but also to convey a sense of the meaning and spirit of Greek literature in the context of Greek history and culture. Enrollment limited to one hundred.

Greek

101. Elementary Greek. Every fall. Mr. Ambrose.
A thorough presentation of the elements of accidence and syntax based, insofar as possible, on unaltered passages of classical Greek.

102. Continuation of Course 101. Every spring. Mr. Ambrose.
In the latter half of the term a work of historical or philosophical prose is read.

203. Plato. Every fall. Ms. Pavlock.

204. Homer. Every spring. Mr. Ambrose.

One of the following advanced Greek courses will be offered each semester:

301. Homer: Odyssey. Spring 1987. Mr. Ambrose.

[**302. Didactic Poetry.**]

[**303. Lyric and Elegiac Poetry.**]

[**304. The Historians.**]

305. Comedy. Spring 1988. Mr. Ambrose.

[**306. Aeschylus.**]

[**307. Sophocles.**]

308. Euripides. Fall 1986. Mr. Ambrose.

[**309. Plato and Aristotle.**]

310. Oratory. Fall 1987. Mr. Ambrose.

[**311. The Myth of Prometheus.**]

[**312. The Alexandrian Age.**]

[**391, 392. Special Topics.**]

Latin

101. Elementary Latin. Every spring. Mr. Rhodes.
A concentrated presentation of the elements of Latin grammar. Designed for students without previous instruction in Latin but also open to students with less than three years of Latin in secondary school.

203. **Cicero.** Every fall. Ms. Lutz.
A rapid review of grammar followed by readings from Cicero and a brief introduction to Latin poetry.
Prerequisite: **Latin 101** or two years of secondary school Latin.

204. **Vergil. The Aeneid.** Every spring. Ms. Lutz.
Prerequisite: **Latin 203** or equivalent.

205. **Horace and Catullus.** Every fall. Ms. Pavlock.
Prerequisite: **Latin 204** or equivalent.

One of the following advanced Latin courses will be offered each semester:

301. **Livy.** Spring 1987. Ms. Pavlock.

[302. **Ovid: Metamorphoses.**]

[303. **Elegiac Poetry.**]

304. **Cicero.** Spring 1988. Ms. Pavlock.

[305. **Vergil: Aeneid.**]

[306. **Roman Novel.**]

307. **Satire.** Fall 1987. Ms. Pavlock.

[308. **Tacitus.**]

[309. **Age of Nero.**]

[310. **Augustan Poetry Survey.**]

[311. **Lucretius.**]

[312. **Roman Comedy.**]

391, 392. **Special Topics.**
Fall 1986. **Vergil's Eclogues and Georgics.** Ms. Pavlock.

290. **Intermediate Independent Study.** The Department.

400. **Advanced Independent Study and Honors.** The Department.

Computer Science and Information Studies

Assistant Professor Silvestro, *Acting Chairman;*
Assistant Professor Werner

Computer science studies computers and the principles of representation, processing, and presentation of information. It is also concerned with the

organization, application, and theoretical characterization of the properties and limitations of computers. Computer science and information studies courses are not designed to train students for careers as programmers but to develop in students an appreciation for the achievements made possible by computers in a technologically based society and for the problems and limitations of computers.

To enter graduate school in computer science, students should become proficient in programming in a general-purpose language such as Pascal, an applicative language such as LISP, and an assembler language. Further, it is necessary to develop an appreciation for the scientific approach to problem solving and to become familiar with traditional areas of research in computer science. As in other problem-oriented disciplines, students should master mathematics and develop problem-solving skills. Students who intend to pursue advanced study should major in mathematics or physics and elect as many computer science and information studies courses as feasible.

Requirements for the Minor in Computer Science and Information Studies: The minor consists of four courses: **Computer Science and Information Studies 101, 102, 220,** and **Mathematics 228.**

101. Introduction to Computer Science I. Every semester. The Department.

The underlying concepts of analysis and design of computer solutions for a variety of problems will be emphasized. Students will then implement their design solutions utilizing a structured programming language. Documentation of each developmental phase will be required. Enrollment limited to 35 per section.

102. Introduction to Computer Science II. Every spring. Spring 1987. Mr. Silvestro.

Students will continue their familiarity with forming well-structured problem solutions. More advanced concepts such as pointers, recursion, various data structures, and system level software will be introduced. Software engineering documentation techniques will be utilized.

Prerequisites: **Computer Science 101** and **Mathematics 228.**

[220. Computer Organization.]

240. Topics in Set Theory and the Foundations of Mathematics. Every other fall. Fall 1987. Mr. Fisk.

See **Mathematics 289,** page 172.

260. Compiler Construction. Every other fall. Fall 1986. Mr. Silvestro.

The design and implementation of compilers will be emphasized. Topics include grammars, lexical and syntactic analysis, parsing tech-

niques, code generation and optimization, and error recovery. Projects reflect the topics being discussed in lecture.

Prerequisite: **Computer Science 220** or consent of the instructor.

275. Topics in AI: Natural Language Processing. Fall 1986. Mr. Werner.

Study of the concepts, algorithms, and programs that enable a computer to converse in English. The course will proceed in stages corresponding to the levels of processing involved, starting with the analysis of syntax (or surface structure) of an English sentence, then semantics (or meaning), and finally pragmatics (or use of the sentence in discourse). The objective is to give the student a good overview of this exciting field. The course is intended to be of interest to all students including those in the humanities and social sciences as well as those in the natural sciences. Neither the text nor the course will presuppose knowledge of programming. Projects, papers will be required.

Prerequisite: **Computer Science 102** or consent of the instructor.

290. Intermediate Independent Study. The Department.

400. Advanced Independent Study and Honors. The Department.

Economics

Professor Gottschalk, *Chairman;* Professors Freeman, Shipman, and Vail; Assistant Professors Connelly, Dean, DeCoster, Fitzgerald, Goldstein, and Wolfe

The Major in Economics is designed for students who wish to obtain a systematic introduction to the basic theoretical and empirical techniques of economics. It provides an opportunity to study economics as a social science with a core of theory, to study the process of drawing inferences from bodies of data and testing hypotheses against observation, and to study the application of economic theory to particular social problems. Such problems include economic development, the functioning of economic institutions (e.g., corporations, government agencies, labor unions), and current policy issues (e.g., poverty, pollution, energy, and monopoly). The major is a useful preparation for graduate study in economics, law, business, or public administration.

The major consists of **Economics 101** and **102,** three "core" courses **(Economics 255, 256,** and **257),** one advanced topics course numbered in the 300s, and two additional courses in economics numbered 200 or above. **Economics 101** is a prerequisite for **Economics 102,** and both are prerequisites for most other economics courses. Prospective majors are encouraged to take at least one core course by the end of the sophomore year and all three core courses should normally be completed by the end of the junior year. Advanced topics

courses normally have some combination of **Economics 255, 256,** and **257** as prerequisites. **Economics 54, Accounting,** does not count toward the economics major.

Qualified students may undertake self-designed, interdisciplinary major programs or joint majors between economics and related fields of social analysis.

Interdisciplinary Major: The department participates in an interdisciplinary major in mathematics and economics. See page 165.

Requirements for the Minor in Economics: The minor consists of **Economics 101** and **102; 255** or **256;** and two electives numbered 200 or above.

Freshman Seminar: The department offers a freshman seminar, **Economics 20,** listed below.

[20. Poverty and Discrimination.]

54. Accounting and the Analysis of Financial Statements. Spring 1987.

Establishes a background in the fundamentals of accounting. Covers journalizing, posting, and trial balance; use of adjusting and closing entries; accounting for receivables and payables; inventory and depreciation; preparation of the balance sheet and income statement. Also examines the role of accounting in the microeconomic decision-making process, product costing, tax allocation, and profit analysis.

Prerequisite: **Economics 101, 102,** and consent of the instructor.

101. Principles of Microeconomics. Every semester. The Department.

An introduction to economic analysis and institutions with special emphasis on the allocation of resources through markets. The theory of demand, supply, cost, and market structure is developed. It is applied to problems in antitrust policy, environmental quality, energy, education, health, the role of the corporation in society, income distribution, and poverty. Students desiring a comprehensive introduction to economic reasoning should take both **Economics 101** and **102.**

102. Principles of Macroeconomics. Every semester. The Department.

An introduction to economic analysis and institutions with special emphasis on determinants of the level of national income, prices, and employment. Current problems of inflation and unemployment are explored with the aid of such analysis, and attention is given to the sources and consequences of economic growth. Alternative views of the effectiveness of fiscal, monetary, and other governmental policies are analyzed.

Prerequisite: **Economics 101.**

207. The International Economy. Fall 1986. Ms. Dean.

An analysis of the factors influencing the direction and composition of trade flows among nations, balance of payments equilibrium and

adjustment mechanisms, and the international monetary system. Basic elements of international economic theory are applied to current issues such as tariff policy, capital flows and international investment, reform of the international monetary system, and the international competitiveness of the American economy.

Prerequisite: **Economics 101** and **102.**

208. **American Economic History and Development.** Fall 1986. Mr. Shipman.

A study of economic growth and industrialization in the United States and Canada, combining elements of development theory, economic geography, and institutional history. A general knowledge of American history is assumed.

Prerequisite: **Economics 101** and **102.**

209. **Economics of Money, Banking, and Finance.** Fall 1986. Mr. DeCoster.

The general principles and institutions of money, banking, and financial markets as they relate to the performance of the economic system. Current problems concerning financial institutions, the flow of funds into investment, the Federal Reserve System, inflation, and the use of monetary and financial controls are considered.

Prerequisite: **Economics 101** and **102.**

210. **Economics of the Public Sector.** Fall 1988. Mr. Fitzgerald.

The economic role of government. Deals with theoretical and policy issues of government expenditures and revenues in meeting such social goals as allocative efficiency and income redistribution. Issues on the current political agenda are given special attention.

Prerequisite: **Economics 101** and **102.**

212. **Labor and Human Resource Economics.** Spring 1987. Mr. Gottschalk.

Theories of labor market structure and performance. Manpower and human resources policies. Topics are covered from an institutional as well as an analytical point of view.

Prerequisite: **Economics 101** and **102.**

213. **History of Economic Thought.** Spring 1988.

A comparative study of the "worldly philosophers" from the seventeenth century onward. Special attention is given to the historical development of those ideas and concepts now constituting the core of economic analysis, and to the relation such ideas bear to the mainstream of intellectual history.

Prerequisite: **Economics 101** and **102.**

†214. **Comparative Political Economy.** Spring 1987. Mr. Vail.

The course begins with an investigation of criteria for defining and evaluating the performance of different modes of production. A his-

torical, class analytic framework for comparative study is set out. The core of the course consists of studies of several paths to socialism including the Soviet Union, China, Hungary, and Yugoslavia. Concludes with a study of Sweden's "middle way" and its implications for late capitalism.

Prerequisite: **Economics 101** and **102**, or consent of the instructor.

215. **Public Enterprise and Regulation.** Fall 1987. Mr. Shipman.

The economic origins, methods, and consequences of public control and/or ownership of economic activity. Primary attention is given to the energy, transportation, and communications industries, with due consideration of international experience.

Prerequisites: **Economics 101** and **102.**

217. **The Economics of Population.** Spring 1988. Ms. Connelly.

A study of the interaction of economic variables and population processes, especially fertility, mortality, and migration. The first half of the course focuses on economic determinants of population, and the second half focuses on the consequences of population growth on the economy.

Prerequisite: **Economics 101** and **102.**

218. **Economics of Resources and Environmental Quality.** Spring 1987. Mr. Freeman.

The economic dimensions of environmental quality and resource management problems faced by the United States and the world. The relationships among population, production, and pollution; the role of market failure in explaining the existence of pollution; evaluation of alternative strategies for pollution control and environmental management; the adequacy of natural resource stocks to meet the future demands of the United States and the world.

Prerequisite: **Economics 101.**

†219. **Underdevelopment and Strategies for Development in Poor Countries.** Spring 1988.

The major economic features of underdevelopment are investigated with stress on economic dualism and the interrelated problems of poverty, inequality, and unemployment. The assessment of development strategies stresses key policy choices, such as export promotion versus import substitution, agriculture versus industry, and capital versus labor-intensive technologies.

Prerequisite: **Economics 101** and **102.**

222. **International Trade and Economic Development.** Spring 1987. Ms. Dean.

International economic problems and policy issues of developing countries. Begins with an examination of an LDC's choice of trade

strategy and its impact on its development. Subsequently examines issues raised by the call for a "new international economic order," including access to industrial country markets, regional integration, the debt crisis, commodity agreements, and foreign aid.

Prerequisites: **Economics 101** and **102.**

[230-239. Contemporary Problems.]

255. Microeconomics. Fall 1986. Mr. Freeman. Spring 1987. Ms. Dean.

An advanced study of contemporary microeconomic theory. Analysis of the theory of resource allocation and distribution with major emphasis on systems of markets and prices as a social mechanism for making resource allocation decisions. Topics include the theory of individual choice and demand, theory of the firm, market equilibrium under competition and monopoly, general equilibrium theory, and welfare economics. Enrollment limited to forty.

Prerequisite: **Economics 101** and **102.**

256. Macroeconomics. Fall 1986. Mr. Wolfe. Spring 1987. Mr. Goldstein.

An advanced study of contemporary national income, employment, and inflation theory. Consumption, investment, government receipts, government expenditures, money, and interest rates are examined for their determinants, interrelationships, and role in determining the level of aggregate economic activity. Policy implications are drawn from the analysis. Enrollment limited to forty.

Prerequisite: **Economics 101** and **102.**

257. Economic Statistics. Fall 1986. Mr. Gottschalk. Spring 1987. Ms. Connelly.

An introduction to the data and statistical methods used in economics. A review of the systems that generate economic data and the accuracy of such data is followed by an examination of the statistical methods used in testing the hypotheses of economic theory, both micro- and macro-. Probability, random variables and their distributions, methods of estimating parameters, hypothesis testing, regression, and correlation are covered. The application of multiple regression to economic problems is stressed. Enrollment limited to forty.

Prerequisite: **Economics 101** and **102.**

Courses numbered above 300 are advanced courses in economic analysis intended primarily for senior majors. Enrollments in these courses are limited to 18 students in each unless stated otherwise.

301. The Economics of the Family. Fall 1986. Ms. Connelly.

Microeconomic analysis of the family, its roles, and its related institutions. Topics will include marriage, fertility, labor supply, human

capital formation, savings, consumption, and bequests, and the family as an economic organization.

Prerequisite: **Economics 255** and **257.**

302. **Business Cycles.** Fall 1986. Mr. Goldstein.

Survey of competing theories of the business cycle, empirical tests of cycle theories, and appropriate macro stabilization policies. Topics include: descriptive and historical analysis of cyclical fluctuations in the United States, Keynesian-Kaleckian multiplier-accelerator models, NBER analysis of cycles, growth cycle models, theories of financial instability, Marxian crisis theory, new classical and new Keynesian theories, and international aspects of business cycles.

Prerequisites: **Economics 256** and **257.**

307. **Advanced International Finance.** Spring 1987. Mr. Wolfe.

Study of theoretical and applied international finance. This course begins with an examination of international financial issues from the firm's perspective: supply and demand for foreign exchange, arbitrage, forward and futures markets, speculation, and Eurocurrency markets. This course concludes with an examination of international financial issues from a policymaker's perspective: fixed *vs.* floating exchange rates, balance of payments accounting, open economy macroeconomic analyses including IS-LM-BB approach, the monetary approach, and the portfolio balance approach. In addition, students are required to present a lecture on some current international financial issue.

Prerequisite: **Economics 256** and permission of the instructor.

308. **Advanced International Trade.** Spring 1988. Ms. Dean.

Study of theoretical and applied international trade. Theoretical models are developed to explain the pattern of trade and the gains from trade. This theory is then applied to issues in commercial policy, such as free trade *vs.* protection, regional integration, the GATT and trade liberalization, foreign direct investment, and the changing comparative advantage of the United States.

Prerequisite: **Economics 255.**

309. **Monetary Economics and Finance.** Spring 1987. Mr. DeCoster.

An advanced study of the domestic financial system. Topics include the functions and operation of financial markets; theories of the financial firm; portfolio theory; the structure of the financial services industry; the effects of financial regulation; the process and consequences of financial innovation; and issues in the conduct of monetary policy.

Prerequisites: **Economics 255** and **256** and **Mathematics 161,** or consent of the instructor.

310. Advanced Public Economics. Fall 1987. Mr. Fitzgerald.

A survey of theoretical and empirical evaluations of government activities, considering both efficiency and equity aspects. Topics include public choice, income redistribution, benefit-cost analysis, analysis of selected government expenditure programs (including social security), incidence and behavioral effects of taxation, and tax reform. Current public policy issues are emphasized.

Prerequisite: **Economics 255** and **257.** Not open to those who have taken **Economics 210.**

312. Advanced Analysis of Labor Market Policies. Fall 1987. Mr. Gottschalk.

An analysis of labor market issues, such as unemployment, discrimination, home production, unionization, and the effects of public assistance on labor supply and childbearing. The focus of the course is on public policy analysis—what are the intended and unintended consequences of government policy? The course does not cover industrial relations topics such as personnel management. Modern labor economics relaxes many of the assumptions in intermediate theory courses (perfect information, lack of transactions costs, instantaneous adjustment of wages, etc.) while retaining a rigorous microeconomic approach.

Prerequisites: **Economics 255** and **257** and the equivalent of **Mathematics 161.** Not open to those who have taken **Economics 212.**

316. Econometrics. Spring 1987. Mr. Goldstein.

A study of the mathematical formulation of economic models and the statistical methods of testing them. A detailed examination of the general linear regression model, its assumptions, and its extensions. Applications to both micro- and macro-economics are considered. Though most of the course deals with single equation models, an introduction to the estimation of systems of equations is included. An empirical research paper is required.

Prerequisite: **Economics 257** or **Mathematics 265,** and **Mathematics 161,** or consent of the instructor. Limited to twenty-five students.

318. Environmental and Resource Economics. Fall 1988. Mr. Freeman.

Analysis of externalities and market failure; models of optimum control of pollution and efficient management of renewable and nonrenewable natural resources such as fisheries, forests, and minerals; benefit-cost analysis, risk-benefit assessment, and the techniques for measuring benefits and costs of policies.

Prerequisite: **Economics 255** and **257.** Not open to those who have taken **Economics 218.**

330-339. Advanced Topics in Economic Analysis.

331. The Economics of Boom, Depression, and Recovery, 1920-1950. Spring 1988. Mr. Shipman.

A study in depth of events, macroeconomic trends, and policies reshaping the American economy over three decades.

Prerequisites: **Economics 256** and **History 230** or **240** or permission of the instructor.

290. Intermediate Independent Study. The Department.

400. Advanced Independent Study and Honors. The Department.

Education

Assistant Professor Page, *Chairman;* Visiting Lecturer Isaacson

Requirements for the Minor in Education: The minor in education requires four courses, one of which may be an independent study.

On pages 88-89 there is a further discussion of careers in teaching.

[101. Education in the Twentieth Century.]

102. History of American Education. Fall 1986.

A study of the evolution of American educational ideas and institutions with particular emphasis on the Progressive Education movement, the increasingly functional nature of the curriculum, and the steady expansion of compulsory education.

201. Schools and Communities. Spring 1987.

The modern secondary school as a complex reflection of local community characteristics and larger social purposes. Students undertake field work on questions of community and professional participation. Studies of the financing of schooling, equal educational opportunity, or bilingual education are the basis of the course reading.

[202. Schooling, Public and Private.]

250. Law and Education. Fall 1986. Mr. Isaacson.

A study of the intersection of two fundamental social institutions: the impact of law and judicial opinion on major current educational issues. Issues to be discussed are state control over schools, student and teacher rights, race relations, sex discrimination, student classification, special and bilingual education, and school financing.

Prerequisite: Upper-class standing and consent of the instructor.

301. Teaching. Fall 1986.

A study of what takes place in classrooms: the methods and purposes

of teachers, the organization of subjects and curriculum, and the response of students. Regular observations in a variety of classrooms are required.

Prerequisite: Two from **Education 101, 102, 201,** and **202,** or consent of the instructor.

302. Student Teaching. Spring 1987.

This final course in the Student Teaching sequence requires considerable commitments of time and responsibilities in a local school classroom. Required of all students who want public school certification, it is also open to those with other serious interests in teaching. In addition to daily work in the school, weekly class meetings and writing are required. Grades are awarded on a credit/fail basis only.

Prerequisite: For seniors, with the permission of the instructor, who have completed **Education 301** and have had experience volunteering in schools.

290. Intermediate Independent Study.

400. Advanced Independent Study and Honors.

English

Associate Professor Burroughs, *Chairman;* Professors Coursen, Greason, Kaster, and Redwine; Associate Professor Watterson; Visiting Associate Professor Pemberton; Assistant Professors DeLamotte, Friedman, Griffin, Litvak, and Reizbaum; Visiting Assistant Professors Goodridge and Smith; Director of Theater Rutan; Visiting Tallman Professor Barksdale

Requirements for the Major in English and American Literature: The major consists of ten courses. At least one semester unit is required from each of four groups: (*a*) **English 200, 201,** or **202;** (*b*) **210** or **211;** (*c*) **220, 221,** or **222;** (*d*) **230, 231, 240,** or **241.** Six additional units may be selected from the foregoing and/or **English 10-29** (freshman seminars, not more than two); **101-103; 250-281; 300-399; 290-291** (independent study); **400-401** (advanced independent study). *Regular courses* **(English 50-99)** *and independent studies* **(English 294-297; English 404-407)** *in theater, film, and communication do not count toward the major.* Majors who are candidates for honors must write an honors essay and take comprehensive examinations, both oral and written, during the senior year. Exceptions to the major requirements may be arranged by the department to encourage and accommodate special individual programs such as interdisciplinary studies.

Requirements for the Minor in English and American Literature: At

least five of the above courses, excluding all courses in theater, film, and communication.

English 10-29
Freshman Seminars in English Composition and Literature

Open to freshmen. The freshman English courses are numbered 10-19 in the fall, 20-29 in the spring. Usually there are not enough openings in the fall for all freshmen who want an English seminar. Freshmen who cannot get into a seminar in the fall are given priority in the spring. The main purpose of the freshman seminars (no matter what the topic or reading list) is to give freshmen extensive practice in *reading* and *writing* analytically. Each section is normally limited to fifteen students. Discussion, outside reading, frequent papers, and individual conferences on writing problems.

Fall 1986

10. Shakespeare. Mr. Coursen.

An examination of themes and patterns in Shakespearean drama. Several papers and a final examination are required. Showings of the BBC-TV productions are an important component of the course.

11. Introduction to Lyric Poetry. Ms. Friedman.

An introduction to the various lyrical genres from the Renaissance to the twentieth century. We will pay special attention to poetic language, tradition, and generic conventions, as well as to texts that self-consciously depart from established norms. Emphasis will be on how to approach poetry rather than on particular authors. Readings will be taken mainly from *The Norton Anthology of Poetry,* with occasional Xeroxed supplements, including translations of some Continental texts.

12. Modernism. Ms. Goodridge.

Close reading of high modernist and modern texts. Writers will include Joyce, Woolf, Proust, Beckett, Hemingway, Stein, Faulkner, and selected poets.

13. Epics and Mock-Epics. Mr. Griffin.

The heroic tradition and its complications in the modern world. Readings include Homer, Vergil, Milton, Dryden, and Pope.

14. Nineteenth-Century Fiction. Mr. Litvak.

Close reading of a series of texts chosen for their resistance to received ideas about life and literature. Works by Austen, Mary Shelley, Hawthorne, Poe, Dickens, Collins, Eliot, and James.

15. Writer and Reader. Ms. Pemberton.

Writers do not always directly tell us what they mean. They use a

veritable arsenal of techniques and narrators to lead us toward understanding. The course examines the rich interplay between literary techniques and reader response and responsibility. Authors include James, Hemingway, Faulkner, and Didion.

16. **Satire.** Mr. Redwine.
An examination of some different methods and objects of satire in works of Sir Thomas More, Shakespeare, Jonson, Voltaire, Swift, Butler, Twain, Huxley, and Orwell.

17. **Problems of Identity.** Ms. Reizbaum.
An examination of the search for and expression of the "self" in modern fiction, drama, and poetry. Authors include Chopin, Lawrence, Joyce, Eliot, Yeats, Heaney, Gwendolyn Brooks, Atwood, Albee, Williams, and Lorrie Moore.

18. **An Introduction to the Drama.** Mr. Watterson.
Begins with Aristotle's *Poetics* and the Theban plays of Sophocles and includes works by Shakespeare, Ibsen, Pirandello, Chekhov, O'Neill, Brecht, Beckett, and Miller.

19. **Detective Fiction.** Ms. Smith.
In this course we will be tracing a historical development of detective fiction, discussing each work in its social context and examining the influence of the earlier writers on the later. Areas of analysis will include concepts of detection (e.g., "spying" vs. praiseworthy discovery), methods of detection (e.g., imaginative identification with the criminal, intuition, ratiocination, patient sifting of clues), and the changing character/perception of the detective. The writers to be studied are Godwin, Poe, Collins, Braddon, Doyle, Sayers, Hammett, Chandler, and Borges.

Spring 1987

20. **The Consciousness of Empire.** Mr. Burroughs.
An examination of literary reactions to the British Empire from the late nineteenth century to the present. Authors will include Kipling, Conrad, Forster, Greene, and Naipaul.

21. **The Teller and the Tale.** Ms. Friedman.
A study of how narrators actively shape narratives in prose fiction ranging from the Enlightenment to the twentieth century. Writers likely to be considered are Defoe, Emily Brontë, Dickens, James, Mann, Nabokov, and Kingston.

22. **American Literature of the 1920s.** Ms. Goodridge.
We will consider the historical forces and aesthetic concerns which shaped this decade of American literature. Writers will include Cum-

mings, Dos Passos, Fitzgerald, Hemingway, Stein, Djuna Barnes, Faulkner, Eliot, Stevens, and Katherine Anne Porter.

23. **Elegy.** Mr. Griffin.
Literary treatment of themes of death and loss. Readings include poems by Milton, Dryden, Pope, Gray, Johnson, Wordsworth, Shelley, Keats, and Yeats, among others.

24. **The American South.** Ms. Pemberton.
An examination of those nineteenth- and twentieth-century authors who make up the so-called southern renaissance. The course will study why this region has produced so many important writers, what issues are at the core of the literature, and how the variety of southern voices has come to create a tradition that is either "part or parcel" of the larger American literary world. Authors include Twain, Faulkner, Warren, O'Connor, Welty, and Percy.

25. **The Narrative Voice.** Ms. Reizbaum.
An examination of narrative voice through different modes and combinations of modes (epic, picaresque, gothic, etc.) or what it means to tell a story. Authors include Homer, Dickens, Poe, Melville, Joyce, Morrison, and Borges.

English 101 and 102
Survey Course in English Literature

A reading course, with examinations designed to familiarize students with the main currents of English literature, from Anglo-Saxon times to the twentieth century. Limited to seventy-five students each semester with preference given in **English 101** to sophomores, juniors, and AP freshmen (in that order) and in **English 102** to students completing **English 101** and to freshmen completing a freshman seminar.

101. Every fall. Fall 1986. Mr. Burroughs.
The course provides a broad introduction, from the beginnings to the end of the eighteenth century. Individual works studied in the context of major stylistic, thematic, and historical developments. Special attention given to specific literary movements, such as the emergence of metaphysical poetry or Augustan neoclassicism, and to consideration of genre, prosody, and mimesis. Major writers include Chaucer, Shakespeare, Donne, Milton, and Pope.

102. Every spring. Spring 1987. Ms. Friedman.
Emphasizes major stylistic, thematic, and historical developments, from the Romantic movement at the end of the eighteenth century, through the Victorian age, and into modern British poetry. Major writ-

ers likely to be considered include Blake, Wordsworth, Shelley, Byron, Keats, Tennyson, Arnold, Browning, Hopkins, Yeats, Eliot, and Auden.

103. The Bible in Literary Focus. Fall 1986. Mr. Long.
See **Religion 50**, page 194.

Courses in Writing, Communication, and Theater Arts

50. Public Speaking. Every fall. Ms. Kaster.
Theory and practice of topic selection, audience analysis, research methods, development and organization of ideas, and delivery techniques. Designed for students with little or no experience in public speaking. Enrollment limited to twenty.
Prerequisite: Consent of the instructor.

51. Topics in Communication. Ms. Kaster.
Spring 1988. **Electronic Film Production.**
An examination of screenplay writing, storyboard construction, videography, sound recording and mix, and electronic editing. Students will produce electronic films. Enrollment limited to twenty.
Prerequisite: Consent of the instructor.

[52. Argumentation.]

[53. History, Theory, and Criticism of Film.]

60. English Composition. Fall 1986. Ms. Smith.
Practice in expository and critical writing, with special attention to the preparation, writing, and analysis of student essays. Ordinarily limited to students not planning to take **English 61.** Enrollment limited to fifteen.
Prerequisite: Consent of the instructor.

61. Advanced Composition. Spring 1987. Mr. Coursen.
Written work with emphasis on imaginative writing. Ordinarily limited to students who have not taken **English 60.** Enrollment limited to fifteen.
Prerequisite: Consent of the instructor. Preference given to seniors.

[62. Literary Composition.]

[63. Playwriting.]

70. Acting and Directing. Every semester. Mr. Rutan.
A studio class for students interested in the fundamentals of acting and directing. Enrollment limited to fifteen.
Prerequisite: Consent of the instructor.

[71. Set Design.]

72. **Technical Theater.** Every semester. Mr. Roderick.
A studio class for students interested in the fundamentals of technical production in the theater. Enrollment limited to fifteen.
Prerequisite: Consent of the instructor.

†[73. Asian Rites and Theater.]

294, 295. **Intermediate Independent Study in Theater.** Mr. Rutan.

404, 405. **Advanced Independent Study in Theater.** Mr. Rutan.

296, 297. **Intermediate Independent Study in Film and Communication.** Ms. Kaster.

406, 407. **Advanced Independent Study in Film and Communication.** Ms. Kaster.

Advanced Courses in English and American Literature

200. **Old English.** Every other year. Fall 1987. Mr. Burroughs.
An introduction to Old English language and literature. Readings in the original, supplemented by materials in translation.

201. **Chaucer.** Every other year. Spring 1988. Mr. Burroughs.
Emphasis on the *Parliament of Fowls, Legend of Good Women,* and *Canterbury Tales.*

202. **Chaucer and His Contemporaries.** Fall 1986. Mr. Burroughs.
Emphasis on the earlier poetry of Chaucer (through the *Troilus*) and the *Gawain* poet.

210. **Shakespeare I.** Every fall. Mr. Coursen and Mr. Watterson.
A study of Shakespeare's comedies; history plays, particularly the Second Henriad (*Richard II* to *Henry V*); and tragicomedies. The Royal Shakespeare Company's video productions are screened regularly as a formal component of the course.

211. **Shakespeare II.** Every spring. Mr. Coursen and Mr. Watterson.
A study of the major tragedies, the Roman plays, and the final comedies. The Royal Shakespeare Company's video productions are screened regularly as a formal component of the course.

220. **English Literature of the Early Renaissance.** Every other fall. Fall 1987. Mr. Redwine.
A critical study of the literature of the sixteenth century, with emphasis upon Elizabethan nondramatic poetry.

221. **English Literature of the Late Renaissance.** Every other spring. Spring 1988. Mr. Redwine.

A critical study of the literature of the seventeenth century exclusive of Milton, with emphasis on the poetry of Donne, Jonson, and their followers.

222. **Milton.** Every other year. Fall 1986. Mr. Redwine.

A critical study of his chief writings in poetry and prose.

230. **Restoration and Early Eighteenth-Century Literature.** Every other year. Fall 1987. Mr. Griffin.

Introduction to the variety and wealth of the period by reading such authors as Bunyan, Congreve, Dryden, Wycherley, Swift, Pope, Defoe, Addison, and Gay.

231. **Late Eighteenth-Century Literature.** Every other year. Spring 1988. Mr. Griffin.

Introduction to the "Age of Johnson" by reading such authors as Gray, Collins, Fielding, Johnson, Goldsmith, Sheridan, and Boswell, among others.

240. **English Romanticism.** Every other year. Fall 1986. Ms. Friedman.

The origins, growth, and nature of romanticism, with emphasis on the pre-Romantics and Blake, Wordsworth, Coleridge, Keats, and Shelley.

241. **Victorian Poetry and Prose.** Every other year. Spring 1987. Ms. Smith.

Readings in the poetry of Tennyson, Arnold, Browning, and Swinburne, and in nonfictional prose by Carlyle, Newman, Mill, Ruskin, Pater, and Wilde.

250. **The Rise of the Novel.** Every other year. Fall 1988. Mr. Griffin.

This course traces the emergence of the novel in the eighteenth century as a distinct genre which absorbed earlier kinds of writing but also provided something new. Authors read include Cervantes, Bunyan, Defoe, Richardson, Fielding, Sterne, and Smollett.

Enrollment limited to forty.

251. **The English Novel I.** Every other fall. Fall 1987. Ms. DeLamotte.

The English novel from 1719 to 1853, with emphasis on the interplay between realism and romance. Background readings in Spenser and Bunyan; novels by Defoe, Richardson, Fielding, Radcliffe, Austen, Emily Brontë, and Charlotte Brontë.

252. **The English Novel II.** Every other spring. Spring 1988. Mr. Litvak.

Continuity and change in the novel from the mid-Victorian period to the early twentieth century. Dickens, Collins, Eliot, Hardy, Forster, Ford, and Woolf.

260. **Twentieth-Century British Poetry.** Every other fall. Fall 1986. Ms. Reizbaum.

Authors will include Eliot, Auden, Yeats, Hugh McDermott, Stevie Smith, Dylan Thomas, and Seamus Heaney.

261. **Twentieth-Century British Fiction.** Every other spring. Spring 1987. Ms. Reizbaum.

Will include such figures as Hardy, Conrad, Joyce, Lawrence, and Woolf.

262. **Modern Drama.** Every other fall. Fall 1987. Ms. Reizbaum.

Plays from the late nineteenth and twentieth centuries. The course usually involves continental playwrights (e.g., Brecht, Chekhov) as well as British and American ones.

270. **American Literature to 1860.** Every other fall. Fall 1986. Ms. Pemberton.

A survey of American literature before 1860 begins with the earliest definitions and evocations of the American character in the literature of New England Puritans and Virginia planters. Emphasis will be placed on the effort by authors from the seventeenth century to the mid-nineteenth to find their own peculiarly "American" voice. Authors include Bradford, Bradstreet, Franklin, Jefferson, Cooper, Hawthorne, Melville, and Emerson.

271. **American Literature 1860-1917.** Every other spring. Spring 1987. Ms. Goodridge.

Works by Chopin, Crane, Cather, O'Connor, Wright, Roth, Frost, Stevens, Moore, Williams, Plath, Roethke, and Dreiser.

272. **American Fiction 1917-1945.** Every other fall. Fall 1987. Ms. Goodridge.

Writers will include such figures as Hemingway, Fitzgerald, Dos Passos, and Faulkner.

Enrollment limited to forty.

273. **American Fiction Since 1945.** Every other spring. Spring 1988. Ms. Goodridge.

Will include such figures as O'Connor, Welty, Updike, Barth, Bellow, and Pynchon.

Enrollment limited to forty.

274. **American Poetry in the Twentieth Century.** Every other fall. Fall 1987. Ms. Friedman.

Will include such figures as Crane, Williams, Stevens, Moore, and Lowell.

Enrollment limited to forty.

280. **American Women Writers.** Every other spring. Spring 1987. Ms. Pemberton.

A study of American women writers from the mid-nineteenth century to the present who, as novelists, essayists, short story writers, and poets, have sought to communicate universal and national implications of being women, of being women writers. The course will include some writers who do not self-consciously follow a feminist theory, others who do. Where are they similar? Where do they diverge? Authors include: Chopin, Wharton, Boyle, McCarthy, Morrison, Didion, and Rich.

Enrollment limited to forty.

281. **Forms of Narrative.** Every other fall. Fall 1986. Mr. Litvak.

A study of the variety, as well as the underlying affinity, of the stories men and women tell in order to make sense of the world. Readings include examples of different narrative genres (autobiography, the novel, the short story, the parable, the Socratic dialogue, the Freudian case history), and of the major theories of narrative (Marxist, formalist, structuralist, psychoanalytic, deconstructive).

Enrollment limited to forty.

300. **Literary Theory.** Every other fall. Fall 1987. Mr. Litvak.

An analysis of semiotic, deconstructive, psychoanalytic, feminist, and Marxist theories of literature. Enrollment limited to fifteen.

Prerequisite: Consent of the instructor.

310-350. **Studies in Literary Genres.** Every year.

Lectures, discussions, and extensive readings in a major literary genre: e.g., the narrative poem, the lyric poem, fiction, comedy, tragedy, or the essay. Enrollment limited to fifteen.

310. **Wallace Stevens and Later American Poetry.** Fall 1986. Ms. Goodridge.

After considering Stevens's poetry, prose, and selected letters, we will explore his influence on a number of other American poets. Writers will include Elizabeth Bishop, James Merrill, John Ashberry, Robert Penn Warren, and Vicki Hearne.

Prerequisite: Consent of the instructor.

311. **Nature, History, and the Imagination.** Spring 1987. Mr. Burroughs.

The focus will be on American non-fictional prose of the nineteenth and twentieth centuries, with particular emphasis on Thoreau. Will include consideration of such recent writers as Dillard, Abbey, and McPhee. There will be some consideration of the English tradition.

Prerequisite: Consent of the instructor.

312. **The Sublime.** Spring 1987. Mr. Griffin.

This is essentially a course in intellectual and literary history which

asks the questions how and why is it that the sublime becomes an important criterion for literature in the eighteenth and early nineteenth centuries. Investigating the use of the term *sublime* in the literature, philosophy, and criticism that extends roughly from Pope to Shelley (1700-1830), we will consider at least three different, yet overlapping contexts: the rhetorical sublime, the natural sublime, and the psychological sublime. A tentative syllabus includes readings from Longinus, Locke, Pope, Addison, Akenside, Collins, Cowper, Burke, Blake, Radcliffe, Coleridge, Wordsworth, Kant, Shelley, and Keats. Secondary readings include Monk, Weiskel, Bloom, and Hertz.

Prerequisite: A course on Milton and/or consent of the instructor.

313. **Langston Hughes and the Afro-American Literary Tradition.** Fall 1986. Mr. Barksdale.

A study of the life, works, and literary career of one of America's outstanding twentieth-century writers. Hughes's fiction, poetry, drama, and literary criticism will be read within the broad cultural context of the Afro-American literary tradition. Special attention will be paid to this author's role in the Harlem Renaissance, his emphasis on urban folk literary styles, and his continuing literary interest in jazz and blues.

Prerequisite: Consent of the instructor.

290. **Intermediate Independent Study.** The Department.

400. **Advanced Independent Study and Honors.** The Department.

Environmental Studies

Administered by the Committee on Environmental Studies
Assistant Professor Laine, *Program Director*

Requirements for the Coordinate Major in Environmental Studies: The major involves the completion of a departmental major (1, below) and advanced work related to environmental studies (2).

1. The departmental major requirement may be satisfied by one of the three following approaches: (*a*) completion of the major requirements in either biochemistry, biology, chemistry, economics, or government; (*b*) the coordinate major in geology-environmental studies—**Geology 101, 102, 256,** and three additional courses in geology, **Physics 103, Chemistry 101, 102,** and two courses in mathematics; (*c*) completion of the major requirements in a department other than those listed above, *provided* that the student's program of studies is approved by the director as to its environmental content.

2. The following environmental studies courses are required:

a) Six courses related to environmental studies, offered by the program

itself or by other departments. Relevant courses in any academic division of the curriculum will be identified by the Environmental Studies Committee on a regular basis. Independent study and some field courses may be included. Relevant courses in other departments that have been identified for the 1986-87 academic year are listed below. Other courses *may* qualify, with prior consultation and approval by the director. Also consult with the director concerning courses offered in previous years that may satisfy the program requirements.

No more than three of these six required courses may be in the area of the student's principal major. Areas of the curriculum are defined as follows:

Sciences: biochemistry, biology, chemistry, geology, physics, mathematics, psychology. *Social Sciences:* economics, government, history, sociology and anthropology. *Arts and Humanities:* classics, art, English, German, music, philosophy, religion, Romance languages.

b) Senior course. A culminating course of one semester is required of majors during the senior year. Such courses are multidisciplinary, studying a topic from the perspectives of at least two of the three areas of the curriculum. **Environmental Studies 390** or **391** normally meets this requirement.

101. Introduction to Environmental Studies. Fall 1986. Mr. Laine.

An examination of the interconnectedness of the various components of the global ecosystem, with a specific focus on ecology and ecosystems, demography, and the characteristics of modern technological society. Environmental problems to be addressed include the quality of the atmosphere and climatic change, depletion of fresh water, loss of soil productivity, loss of genetic diversity, toxic contamination, waste disposal, and tropical deforestation.

200. Marine Ecology. Spring 1987. Mr. Gilfillan.

The relationships between organisms and their environment considered in the context of animals and plants living in the sea. The concept of marine communities living in dynamic equilibrium with their physical-chemical environment is introduced and the influences of human activities on the ecology of marine organisms is explored.

Prerequisite: A college-level science course, or consent of the instructor.

202. Experimental Design and Data Analysis for Environmental Scientists. Spring 1987. Mr. Gilfillan.

This course is intended to provide students in the environmental sciences with the skills required to gain quantitative information about environmental conditions and processes. Areas of emphasis will include 1) formulating testable hypotheses, 2) experimental design, 3) analysis

of experimentally collected data, and 4) interpretation and presentation of analytical results. The local marine environment will be used in laboratory exercises. Emphasis will be on the use of microcomputers and currently available software for data analysis and presentation. Some familiarity with microcomputers is desirable but not essential. Lectures and three hours of laboratory work per week. Enrollment limited to twenty.

Prerequisite: At least one college-level science course or permission of the instructor.

220. **Environmental Law.** Spring 1987. Mr. Delogu.

This course examines concepts dealt with in remedies, administrative law, and constitutional law to assess how the society responds to environmental problems. A range of alternative legal strategies is considered. The course will also draw on non-legal materials, primarily from economics and the sciences, to understand the nature of these problems and probable solutions.

390. **Seminar in Environmental Studies.**

Fall 1986. **Radioactive Waste Disposal.** Mr. Laine and Mr. Gilfillan.

An examination of the scientific, engineering, legal, political, and social aspects of the disposal of nuclear waste. The course will focus on U.S. and international policy and practice. Student groups will work on issues within the state of Maine. Limited to twenty-five students.

Prerequisite: Junior or senior standing and permission of the instructor.

391. **Seminar in Environmental Studies.**

Spring 1987. **Regulating Chemicals in the Environment: Scientific, Legal, and Economic Aspects.** Mr. Freeman.

Human exposure to synthetic chemicals and heavy metals (such as pesticides, dioxins, and lead) through a variety of channels can lead to increased risks to human health. At the same time the use of these chemicals conveys a variety of benefits to society such as lower costs of food production. Thus regulation of these chemicals to protect human health involves trade-offs. The questions to be addressed in this course include: how are these trade-offs made today, and how should these trade-offs be made in a society that desires to improve human welfare. Specific topics to be covered include: the scientific basis for assessing health risks, techniques for controlling exposures to chemicals, benefit-cost and risk-benefit analysis, and the present legal framework for regulation. The course will include case studies of the regulation of specific chemicals.

Prerequisite: Junior or senior standing and permission of the instructor.

290. Intermediate Independent Study.

400. Advanced Independent Study and Honors. The Program.

CROSS LISTINGS

Sciences

Biology 115. Ecology. Fall 1986. Mr. Wheelwright.
See **Biology 115,** page 106.
Prerequisite: **Biology 101** or **102.**

Biology 154. Ornithology. Spring 1987. Mr. Wheelwright.
See **Biology 154,** pages 106-107.
Prerequisite: **Biology 102** and/or **115,** or consent of the instructor.

Geology 50. Ocean Basins and Margins. Spring 1987. Mr. Laine.
See **Geology 50,** pages 139-140.

Geology 256. Environmental Geology. Spring 1987. Mr. Laine.
See **Geology 256,** page 141.
Prerequisite: **Geology 101** or permission of the instructor.

Social Sciences

Anthropology 231. Native Peoples and Cultures of Arctic America. Fall 1986. Ms. Kaplan.
See **Anthropology 231,** page 213.
Prerequisite: **Anthropology 101** or **102,** or **Sociology 101.**

Economics 218. Economics of Resources and Environmental Quality. Spring 1987. Mr. Freeman.
See **Economics 218,** page 121.
Prerequisite: **Economics 1.**

Sociology 217. World Population. Fall 1986. Ms. Floge.
See **Sociology 217,** page 210.
Prerequisite: **Sociology 101, Anthropology 101,** or consent of the instructor.

Humanities

Art 277. Architectural Design II. Spring 1987. Mr. Glass.
See **Art 277,** page 103.
Prerequisite: **Art 267** or consent of the instructor.

English 311. Nature, History, and the Imagination. Spring 1987. Mr. Burroughs.

See **English 311,** page 134.

Prerequisite: Consent of the instructor.

Philosophy 58. Environmental Ethics. Fall 1986. Ms. Coleman.

See **Philosophy 58,** page 180.

Other courses can be considered for credit in the Environmental Studies Program with prior approval by the director. It is the student's responsibility to consult with the director and to demonstrate the course's relevance to his or her course of studies. Courses that fall into this category for the 1986-87 academic year include:

Government 341. Advanced Seminar in Political Theory: Politics of Utopia. Fall 1986. Mr. Rensenbrink.

See **Government 341,** page 148.

Geology

Professor Hussey, *Chairman;* Assistant Professor Laine

Students contemplating advanced study in geology should consult with the chairman of the department as soon as possible. They should plan a joint major between geology and chemistry, physics, biology, or mathematics, or the geology-environmental studies coordinate major. **Geology 101** and **102** should be taken during the freshman year. By the end of the junior year **Mathematics 161** and **171,** two semesters of chemistry, and one semester of physics should be completed. A one-week field trip is taken during the second week of the spring vacation to illustrate the various aspects of the geology of the northern Appalachians. All coordinate, joint, and interdisciplinary geology majors are expected to participate in at least one of these trips during the junior or senior year.

Interdisciplinary Major: The department participates in an interdisciplinary program in geology and physics. See page 165.

Requirements for the Minor in Geology: The minor consists of two courses chosen from **Geology 50, 101, 102,** or **201,** and two courses chosen from **Geology 211, 241, 256,** or **262.**

50. Geology of Ocean Basins and Margins. Every spring.

Examines the processes of erosion and sedimentation of shoreline and near-shore environments, emphasizing the delicate equilibrium of these environments; the morphology of and physical processes operating in the ocean basins; the origin and evolution of ocean basins in light of

recent research in plate tectonics; the paleontologic and climatic record recorded in ocean sediments. Three hours of lecture per week.

No previous experience in science courses will be assumed.

101. Introduction to Physical Geology. Every fall.

Lectures devoted to the composition and structure of the earth and the dynamic equilibrium processes that shape the surface of the earth. Field and indoor laboratory studies include the recognition of common rocks and minerals, the interpretation and use of topographic and geologic maps, and dynamics of processes that shape our landscape. A one-day trip is taken to York County to examine evidence for glaciation, recent sea level changes, structures and types of metamorphic rocks, and sequence of intrusion of four major magma series. Three lectures and three laboratory hours each week.

No previous experience in science courses will be assumed.

102. Introduction to Historical Geology. Every spring.

Lectures devoted to a study of the principles involved in the interpretation of geologic history as deciphered from the rock record and a review of present knowledge of the evolution of the earth and its inhabitants. Laboratory work includes the recognition of fossils and their modes of preservation, interpretation of geologic maps, and a summary of the geologic history of the principal tectonic belts of North America. A three-day field trip is taken in the spring to illustrate important aspects of the geologic history of the southern and central coastal Maine area. Three lecture and three laboratory hours each week.

Prerequisite: **Geology 101** or consent of the instructor.

201. Earth Materials. Spring 1987 and 1989.

Lectures devoted to the identification, classification, origin, manner of occurrence, and uses of the principal rock-forming and economic minerals, rocks, and sediment types. Laboratory work includes both indoor and field examination and identification of rocks, minerals, and surficial sediments, emphasizing hand-specimen techniques. Three hours of lecture and a three-hour laboratory each week.

211. Optical Mineralogy and Crystallography. Fall 1987 and 1989.

Lectures devoted to morphological and X-ray crystallography, crystal chemistry, and optical mineralogy of the common rock-forming minerals. Laboratory work includes the examination and identification of minerals in thin section and as grains in immersion oil, using the polarizing microscope; morphological crystallography; and X-ray diffraction techniques. Three lecture hours and one three-hour laboratory each week.

Prerequisite: **Chemistry 101** or **Geology 50** or **101.**

241. **Structural Geology.** Fall 1986 and 1988.
The primary and secondary structures of rocks, and the interpretation of crustal deformation from these features. Laboratory work includes structural interpretation of geologic maps, construction of cross sections, and the use of stereographic projections and orthographic constructions in the solution of structural problems and presentation of data. Three lecture hours and three laboratory hours each week.
Prerequisite: **Geology 101** or **Geology 50** with consent of the instructor.

256. **Environmental Geology.** Spring 1987 and 1989. Mr. Laine.
The application of geological and geomorphological principles to the understanding and solution of contemporary and future land use issues. Principles will be mastered through both lectures and the reading of case studies. Field exercise emphasizes observation, mapping, and analysis of geologic information as it applies to coastal zone management.
Prerequisite: **Geology 101** or consent of the instructor.

262. **Petrology.** Spring 1988.
The classification, description, and genesis of the common rock types. Three hours of laboratory work each week devoted to the identification of rocks in hand specimen and examination of thin sections with the use of the polarizing microscope. Three lecture hours and one three-hour laboratory each week.
Prerequisite: **Geology 211.**

[270. **Geomorphology.**]

290. **Intermediate Independent Study.** The Department.

400. **Advanced Independent Study and Honors.** The Department.

German

Professor Hodge, *Chairman;* Associate Professors Cafferty and Cerf; Teaching Fellow Kanert

Requirements for the Major in German: The major consists of any six courses from **German 205** through **404** with the following exceptions: no more than one semester of **205-206** and no more than one semester of **291-292.**

Requirements for the Minor in German: German 102 or equivalent, plus any four courses, of which two must be in the language **(203-206, 313-319, 322).**

51. **German Literature in English Translation.** Every fall. Ms. Cafferty.
This course may be repeated for credit with contents changed.

Fall 1986. **Literature of the Two Germanies: Texts and Contexts.**
Focus on major themes in the literature of the Federal Republic of

Germany and the German Democratic Republic: (1) Coming to terms with the past. (2) Building a new society. (3) Berlin and the politics of division. (4) Problems between the generations. (5) The position of women in society. (6) The role of tradition. Emphasis on the relationship between art and politics in the two societies.

Writers include Borchert, Grass, Böll, Fühmann, Seghers, Müller, Wolf, and Schneider. Film and video will supplement readings.

52. **Myth and Heroic Epic of Europe.** Spring 1988. Mr. Hodge.

Myths, legends, sagas, and other folk literature of the Germanic, Celtic, and Finno-Ugric traditions, e.g., the Prose and Poetic Eddas, Song of the Volsungs, Beowulf, Lay of the Nibelungs, the Mabinogian, the Cycle of Finn, the Cycle of Ulster, the Kalevala. Where possible and desirable, comparisons may be drawn with other mythologies; mythological and legendary material may be supplemented by relevant folkloric, Arthurian, and semihistorical literature. In English.

101, 102. **Elementary German.** Every year. Fall 1986. Mr. Hodge. Spring 1987. Ms. Cafferty.

Three hours a week of training in grammar, composition, and reading. One hour of conversation/drill with teaching assistant or teaching fellow. Language laboratory also available.

203, 204. **Intermediate German.** Every year. Fall 1986. Mr. Cerf. Spring 1987. Mr. Hodge.

Three hours a week of reading, composition, and review of grammar. One hour of conversation/drill with teaching assistant or teaching fellow. Language laboratory also available.

Prerequisite: **German 102** or equivalent.

205, 206. **Advanced German Language.** Every year. Fall 1986. Ms. Cafferty. Spring 1987. Mr. Cerf.

Designed to increase oral fluency, compositional skills, and understanding of spoken German. Stylistics and idiomatic usages may be emphasized.

Prerequisite: **German 204** or equivalent.

[208. **Advanced Translation: German to English.**]

313. **The Development of Literary Classicism.** Fall 1987.

Beginning with the reaction against the Age of Reason and continuing into the later works of Goethe and Schiller.

Prerequisite: **German 204** or equivalent.

314. The Romantic Movement. Spring 1988.

Its literary philosophy, several schools of thought, and preferred genres, including consideration of such representative or influential figures as Tieck, A. W. and F. Schlegel, Kleist, Arnim, Brentano, Chamisso, Eichendorff, E. T. A. Hoffmann, and Schopenhauer.

Prerequisite: **German 204** or equivalent.

315, 316. Literature of the Nineteenth and Twentieth Centuries. Fall 1986. Mr. Cerf. Spring 1987. Ms. Cafferty.

German literature ca. 1830-1945. Such authors as Hebbel, Storm, Meyer, Keller, Hauptmann, Hofmannsthal, Mann, Kafka, and Brecht are included.

Prerequisite: **German 204** or equivalent.

317. German Literature since 1945. Fall 1986. Mr. Hodge.

Representative postwar authors from East and West Germany, Austria, and Switzerland.

Prerequisite: **German 204** or equivalent.

319. The Short Prose Form. Fall 1987.

Unique theory, form, and content of the German *Novelle* as it has developed from Goethe to the present.

Prerequisite: **German 204** or equivalent.

398. Seminar in Aspects of German Literary History. Every spring.

Work in a specific area of German literature not covered in other departmental courses, e.g., individual authors, literary movements, genres, cultural influences, and literary-historical periods. *This course may be repeated for credit with contents changed.*

Prerequisite: **German 204** or equivalent.

Spring 1987. **The Literary Imagination and the Holocaust.** Mr. Cerf.

Examines the literary treatment of the Holocaust, a period between 1933 and 1945, during which eleven million innocent victims were systematically murdered by the Nazis. Four different literary genres examined: the diary and memoir, the drama, poetry, and the novel.

Particular attention will be given to the dramas of Brecht, Zuckmayer, Frisch, and Weiss; the poetry of Sachs and Celan; and the prose of T. Mann, Becker, and von Rezzori.

290. Intermediate Independent Study. The Department.

400. Advanced Independent Study and Honors. The Department.

Government and Legal Studies

Professor Potholm, *Chairman;* Professors Morgan and Rensenbrink; Associate Professor Springer; Assistant Professors Huskey and Martin; Instructor McConnell

Requirements for the Major in Government and Legal Studies: Courses within the department are divided into five fields: American government **(Government 200, 201, 202, 203, 204, 210-211, 250, 270, 301, 341),** comparative politics **(Government 223, 224, 225, 226, 227, 230, 235, 271, 275,** and **321),** political theory **(Government 225, 240, 241, 242, 250, 255,** and **341),** international relations **(Government 226, 227, 235, 260, 261, 270, 271, 275,** and **361),** and public policy **(Government 202, 203, 204, 210-211, 255, 270, 275, 301,** and **341).** Every major is expected to complete an area of concentration in one of these fields.

The major consists of one Level A course, six Level B courses, and one Level C course, distributed as follows:

1. A field of concentration, selected from the above list, in which at least two Level B courses and one Level C course are taken.

2. At least one Level B course in each of three fields outside the field of concentration.

Students seeking to graduate with honors in government and legal studies must have an honors average within the department. Each must prepare an honors paper, which is normally the product of two semesters of independent study work, and have that paper approved by the department. One semester of independent study work may be counted toward the eight-course departmental requirement and the three-course field concentration.

Requirements for the Minor in Government and Legal Studies: A minor in government and legal studies will consist of one Level A course and four level B courses from three of the departmental subfields.

Level A Courses

Government 100
Introductory Seminars

Topics and course requirements will vary from seminar to seminar and year to year according to the interests of the instructor. All are designed to provide an introduction to a particular aspect of government and legal studies. Students are encouraged to analyze and discuss important political concepts and issues, while developing research and writing skills.

Enrollment is limited to twenty in each seminar. Freshmen are given first priority; sophomores are given second priority. If there are any remaining places, upperclassmen may be admitted with consent of the instructor.

Fall 1986

100. Religion and Politics in America. Mr. McConnell.

101. Comparative Political Systems. Mr. Huskey.

102. Caribbean Forms. Mr. Potholm.

103. The Pursuit of Peace. Mr. Springer.

Spring 1987

104. Politics: The Ecological Connection. Mr. Rensenbrink.

105. American Politics: Representation, Participation, and Power. Ms. Martin.

[**111. Introduction to American Politics.**]

160. Introduction to International Relations. Spring 1987. Mr. Potholm and Mr. Springer.

Identifies and explains patterns of interaction among nation-states. Focuses on developments since World War II, but many lectures draw on material from other periods. Such topics as the nature of man and the causes of war, the international espionage subculture, revolutionary change, and environmental constraints are considered.

Level B Courses

Level B courses are designed generally for students with a previous background in government and legal studies. All, unless otherwise noted, require that a student have taken a Level A course or have received the consent of the instructor. Course requirements will vary from course to course, but most of the courses at this level adopt a lecture format.

[**200. Local Governments.**]

201. Law and Society. Spring 1987. Mr. Morgan.

An examination of the American criminal justice system. Although primary focus is on the constitutional requirements bearing on criminal justice, attention is paid to conflicting strategies on crime control, to police and prison reform, and to the philosophical underpinnings of the criminal law.

Prerequisite: Sophomore-year standing.

202. The American Presidency. Fall 1986. Ms. Martin.

An examination of the presidency in the American political system, including presidential selection, advisory systems, the institutionalized

presidency, and relations with Congress and the courts. Problems and techniques of presidential decision-making.

[203. **Elections, Parties, and Interest Groups in America.**]

204. **The Policy-Making Process.** Spring 1987. Ms. Martin.
An examination of the policy-making process in the United States. The focus will be at the national level with emphasis given to the role of the U.S. Congress, including executive-congressional relations. Topics will include recent changes in the budgetary process, as well as congressional procedures and their impact on policy outcomes.

*210-211. **American Constitutional Law.** Every year. Mr. Morgan.
Constitutional principles in the United States. The case method is used in the presentation of material.
Prerequisite: Junior- or senior-year standing, or consent of the instructor.

†223. **African Politics.** Fall 1986. Mr. Potholm.
An examination of the underlying political realities of modern Africa. Emphasis on the sociological, economic, historical, and political phenomena which affect the course of politics on the continent. While no attempt is made to cover each specific country, several broad subjects, such as hierarchical and polyarchical forms of decision making, are examined in depth. There is a panel discussion with African students and scholars at the end of the course.

224. **Western European Politics.** Every other year. Spring 1987. Mr. Huskey.
An introduction to the varieties of democratic politics in Western Europe. The course will be approached topically, with components on the state and bureaucratic politics, parties and interest groups, and voting and public opinion. Recent theoretical literature on the democratic state and on state-group relations will supplement traditional readings focusing on political institutions and behavior in four countries: France, Great Britain, Sweden, and West Germany. Enrollment limited to seventy-five.

[225. **Political Analysis and the Forces of Change.**]

[†227. **Ethnicity and Politics in South and Southeast Asia.**]

†230. **Soviet Politics.** Spring 1987. Mr. Huskey.
An introduction to the domestic politics of the USSR. The first half of the course is devoted to Soviet political development and to problems of conceptualization in the study of Soviet socialism. The second half examines the party and government bureaucracy: its structure, personnel, internal relations, links with society, and its handling of pressing issues of public policy.

†235. **Advanced Comparative Government.** Fall 1986. Mr. Rensenbrink.
The Soviet Union, China, and Poland: a comparison of three Communist regimes.

240. **History of Western Political Theory: Ancient to Modern Thought.** Fall 1986. Mr. McConnell.
An analysis of Western political thought from the time of the Greek *polis* to the Reformation and the early modern state.

241. **History of Western Political Theory: Modern and Contemporary Thought.** Spring 1987. Mr. McConnell.
A continuation of **Government 240.** An analysis of modern western political thought, including the work of such contemporary theorists as Oakeshott, Camus, and Rawls.

242. **Racial and National Minorities, Women, and the State.** Spring 1987. Mr. Rensenbrink.
Themes include a multi-racial society, feminism and the state, the political implications of class theory, communalism and the state, and the federal principle applied on a world scale. The aim is to formulate a provisional concept of the heterogeneous state. A world-wide variety of twentieth-century authors will be selected for study.

250. **American Political Thought.** Spring 1987. Mr. McConnell.
Considers the classic elements of the history of American political thought from the founding period to the present. The course will not attempt to cover every age or every thinker but aims instead for some depth on selected topics of debate between major American political thinkers. Concludes with an exploration of a variety of interpretations of the history of American intellectual and political thought.

255. **Approaches to Political Science: Quantitative Analysis in Political Science.** Fall 1986. Ms. Martin.
Introduction to some of the methodological approaches used in studying political phenomena, including the use of quantitative methods. Topics include the benefits and limitations of quantitative methods, research design, measurement, survey research and public opinion polls, and basic statistical analysis. Instruction in the use of computer-based statistical programs through the analysis of existing data sets or student-generated data, or the use of micro-computer programs. No prior experience in computing or statistical analysis is assumed or necessary.

260. **International Law.** Fall 1986. Mr. Springer.
The modern state system, the role of law in its operation, the principles and practices which have developed, and the problems involved in their application.

[261. International Organization.]

270. **American Foreign Policy: Its Formulation and the Forces Determining Its Direction.** Spring 1987. Mr. Springer.

The major theories concerning the sources and conduct of American foreign policy since World War II. The approach emphasizes the interrelationship of political, social, and economic forces which shape United States diplomacy.

Prerequisite: Sophomore standing.

271. **Soviet Foreign Policy.** Fall 1986. Mr. Huskey.

Examines Soviet conduct in world affairs from the October Revolution of 1917 to the present. The development of Soviet perceptions, motivations, and modes of behavior in international relations will be analyzed against the background of the changing world order and the maturing system of state socialism in the Soviet Union.

[275. Advanced International Politics: Global Crises.]

Level C Courses

Level C courses provide seniors (and juniors, with the consent of the instructor) an opportunity to do advanced work within their fields of concentration. This may be done in the context of a seminar or through independent study with a member of the department, or through the honors seminar.

301. **Advanced Seminar in American Politics: Reforming the Intelligence Agencies.** Fall 1986. Mr. Morgan.

341. **Advanced Seminar in Political Theory: Politics of Utopia.** Fall 1986. Mr. Rensenbrink.

361. **Advanced Seminar in International Relations: Conflict Simulation and Conflict Resolution.** Spring 1987. Mr. Potholm.

400. **Advanced Independent Study and Honors.** The Department.

History

Professor Nyhus, *Chairman;* Professors Howell, Levine, and Whiteside; Associate Professor Karl; Assistant Professors Jones, McMahon, Smith, and Stakeman; Instructor Lewallen; Visiting Instructors Shaw and Cheek

Requirements for the Major in History: The departmental offerings are divided into the following fields: Europe (may be divided into two fields: Europe to 1715 and Europe since 1500), Great Britain, United States, East

Asia, Africa, and Latin America. In meeting the field requirements, courses in Europe between 1500 and 1715 may be counted toward early or modern Europe but not toward both of them. At least one field must be in East Asia, Africa, or Latin America. Students may, with departmental approval, define fields which are different from those specified above.

The major consists of eight courses, distributed as follows:

1. A primary field of concentration, selected from the above list, in which four or more courses are taken. One of the courses must be numbered in the 300s, selected with departmental approval, in which a research essay is written.

2. Two supplemental fields, in each of which two courses are taken.

Economics 208 and **Biology 51** may be counted toward the history major.

All history majors seeking departmental honors will enroll in at least one semester of the Honors Seminar **(History 451, 452)**. Its primary requirement is the research and writing of the honors thesis. In addition, the seminar is to provide a forum in which the students, together with the faculty, can discuss their work and the larger historical questions that grow out of it.

With departmental approval a student may offer for credit toward the history major college-level work in history at other institutions. This work may represent fields other than those that are available at Bowdoin. A student who anticipates study away from Bowdoin should discuss with the department, as early in his or her college career as possible, a plan for the history major which includes work at Bowdoin and elsewhere.

The freshman-sophomore seminars listed under **History 10-25** are not required for the major, but one such seminar may count toward the required eight courses.

Before electing to major in history, a student should have completed or have in progress at least two college-level courses in history.

History majors are encouraged to develop competence in one or more foreign languages and to use this competence in their historical reading and research. Knowledge of a foreign language is particularly important for students planning graduate work.

Each major should select a departmental adviser. A student should plan, in consultation with his or her adviser, a program that progresses from introductory to advanced levels. The courses numbered in the 300s presuppose a reasonable background understanding. They are open with the consent of the instructor to history majors and other students, normally upperclassmen.

Enrollment in a problems course is limited to fifteen students. Each freshman-sophomore seminar **(History 10-25)** is limited to twenty. Other history courses are limited to seventy-five students each.

Requirements for the Minor in History: The minor consists of five courses, three to be taken in a field of concentration chosen from the list specified by

the department for a major. The remaining two are to be in a subsidiary field selected from the same list.

East Asian Studies Concentration: Majors in history may elect the East Asian Studies Concentration, which consists of the following requirements: four courses in East Asian history, including at least one research seminar; two courses in a field of history other than East Asian; and four semesters of Chinese or Japanese language.

Foreign study for students interested in East Asian studies is highly recommended. Established programs in Hong Kong, Taiwan, Japan, and the People's Republic of China are available. Consult the instructor in East Asian history for information about various programs.

Course Selection for Freshmen: Although courses numbered 10-25 and 101-102 are designed as introductory courses, freshmen may if they wish enroll in courses numbered 201-279.

10-21. Freshman Seminars.

The following seminars are introductory in nature. They are designed for freshmen who have little background in history generally or in the period and area in which the particular topic falls. Enrollment is limited to twenty students in each seminar.

Objectives are (*a*) to cover the essential information relating to the topic, together with a reasonable grounding in background information; (*b*) to illustrate the manner in which historians (as well as those who approach some of the topics from the point of view of other disciplines) have dealt with certain significant questions of historical inquiry; and (*c*) to train critical and analytical skills.

The seminars are based on extensive reading, class discussion, oral reports, two or three short critical essays, and an examination.

Fall 1986

[Seminar 12. American Democracy in Theory and Practice since 1776.]

Seminar 13. The Individual and Community in America. Fall 1986. Mr. Whiteside.

It is often alleged that the United States is an excessively individualistic country, in contrast to others which subordinate individual aspirations to the welfare of the larger community. The identification of past and continuing formative influences in American society will be examined in the writings of representative Americans, including Thomas Jefferson, Abraham Lincoln, Alexis de Tocqueville, Robert and Helen Lynd, David Riesman, Ann Douglas, and Robert Bellah. Discussions, oral presentations, debates, and several critical essays will be required. The objective of the seminar will be to determine the implications of individualism for an understanding of family patterns, education, popular culture, public policy, and foreign relations.

Seminar 15. The Civil Rights Movement. Fall 1986. Mr. Levine.

Concentrating on the period from 1954 to 1970, a major point of this course will be to show how various individuals and groups have been pressing for racial justice for decades. Special attention paid to social action groups ranging from the NAACP and SNCC, and to important individuals, both well-known (Booker T. Washington) and less well known (John Doar). Readings mostly in primary sources.

Seminar 16. Slavery in the American South. Fall 1986. Mr. Lewallen.

An historical examination of the institution of slavery in the American South. While the course will concentrate primarily on the development of slavery in the nineteenth century, such issues as the Atlantic slave trade and comparative slave systems outside the South will be explored. Readings, discussions, and essays will focus principally on the historical origins of American racial attitudes; the growth, expansion, and changing nature of Southern slavery; and the impact of the institution on slave personality, family, and other social organizations.

Spring 1987

†**Seminar 18. Regional Conflict in Central America.** Spring 1987. Ms. Jones.

Examination of historical roots of contemporary conflict in Central America. Research topics focus on the role of foreign capital in national economies, the development of coercive labor conditions, neo-colonialism, movements toward agrarian reform, the changing position of the Church, and the political solutions attempted by different Central American governments.

[†**Seminar 20. Traditional China.**]

†**Seminar 21. The Chinese Cultural Revolution.** Spring 1987. Mr. Smith.

The Cultural Revolution (1966-1976) is now condemned by the Chinese government as enthusiastically as it was once heralded. What happened? This course has two interrelated goals: to study a complex historical problem and to learn how to read critically in historical materials, both primary and secondary.

Fall 1987

Seminar 10. Jewish Life in Medieval Europe. Fall 1987. Mr. Nyhus.

View of Western European life through the eyes of the Jewish minority. Readings include the writings of the Jewish people and writings about Jewish people. Social theories which seek to explain the relation between a majority and minority culture examined. Several short essays required.

Seminar 11. Women in Britain and America, 1750-1920. Fall 1987. Ms. McMahon.

A comparative examination of the contribution of women to and the consequences for women of "modernization." Topics include industrialization and the varieties of employment for women, Victorian culture and domesticity, and women's rights and woman suffrage. Relies heavily on primary sources: letters, diaries, essays, prescriptive literature, fiction; secondary sources used as guides in the reading of those contemporary sources. Designed to teach students how to subject primary and secondary source materials to a critical analysis.

101. Europe from Ancient Greece through the Reformation. Fall 1987. Mr. Nyhus.

An introduction to early Western civilization beginning with Greece and Rome and continuing to the Reformation era. The course focuses on special problems (e.g., the crisis of the late Roman republic) in each era and analysis of the various methodologies which help to explain those problems.

102. A Social and Intellectual History of Modern Europe, 1789-Present: Western and Eastern Perspectives. Fall 1986. Mr. Shaw.

An introduction to modern European civilization comparing developments in Eastern and Western Europe. Topics to be covered include the development of a modern states system, industrialization and "modernization," and patterns of democratization.

201. Ancient Greece. Every other year. Fall 1986. Mr. Nyhus.

A survey of the political, social, and economic history of Greece from the second millennium B.C. through the Hellenistic period. Focus on the fifth century B.C. Extensive selections of Herodotus and Thucydides as well as dramatists, poets, and philosophers.

202. Ancient Rome. Every other year. Spring 1988. Mr. Nyhus.

A survey of the political, social and economic history of the Republic and Empire. Extensive selections of Livy, Tacitus, and Suetonius as well as literary texts.

203. Europe in the Middle Ages, 1050-1300. Fall 1987. Mr. Nyhus.

A survey covering political and social institutions as well as intellectual and cultural movements of twelfth- and thirteenth-century Europe.

[204. Renaissance Europe.]

205. **The Intellectual History of the Renaissance and Reformation.** Spring 1986. Mr. Nyhus.

Investigation of the ideologies of the Renaissance and Reformation in their social settings. Authors from the fourteenth through the sixteenth centuries are studied to determine the ways in which they reflected and shaped their societies. Authors considered include Dante, Petrarch, Marsiglio, Salutati, Machiavelli, Castiglione, Erasmus, More, Luther, Calvin, Rabelais, Montaigne, and Bodin.

206. **Florence and Strasbourg during the Renaissance.** Spring 1987. Mr. Nyhus.

An analysis of the economic, social, and political structures of two key cities of the Renaissance together with the culture which made them famous.

211. **Europe 1517-1715: Reformation to Louis XIV.** Spring 1988. Mr. Karl.

The Reformation serves as introduction to the social, political, and intellectual development of continental Europe to the death of Louis XIV.

212. **Europe 1715-1848: Enlightenment, Revolution, and Napoleon.** Spring 1988. Mr. Karl.

A survey of continental European evolution from the death of Louis XIV to the revolutions of 1848, with focus on the French Revolution and its role in European development.

213. **Jewish History from 1789 to the Formation of the State of Israel.** Fall 1986. Mr. Shaw.

A survey of modern Jewish history from the French Revolution to the establishment of the state of Israel. Topics to be covered include the birth of modern Jewish religious ideologies (reform and conservative), communal structure, Jewish-Gentile relations, and Jewish political movements.

215. **Germany 1900-1945.** Fall 1987. Mr. Karl.

After a brief survey of German development, the course focuses on the reasons for the rise of National Socialism and particularly on the nature of the Nazi dictatorship.

217. **History of Russia to 1825.** Spring 1987. Mr. Karl.

A broad survey beginning with medieval Russia but concentrating on the rise of Muscovy, Peter the Great, and the development of autocracy and serfdom down to the Decembrist revolt.

218. **History of Russia: 1825 to the Present.** Spring 1988. Mr. Karl.

Begins with the reign of Nicholas I and focuses mainly on the long-

term coming, course, and aftermath of the Revolution of 1917. No prior knowledge of European history is expected.

220. The British Experience. Fall 1986. Mr. Howell.

Examination of selected topics in the social, cultural, intellectual, economic, and constitutional history of the British Isles as a means of understanding the distinctive elements in the British experience. Emphasis is placed on an interdisciplinary approach to such subjects as the making of the landscape, the concept of nationhood, the role of tradition, the social dimensions of the arts, religious expression, popular culture, and the experience of immigrant groups.

221. History of England to 1550. Spring 1988. Mr. Howell.

A survey of the political, cultural, intellectual, social, and economic aspects of English life from pre-Roman times to the Reformation.

222. History of England from the Sixteenth to the Nineteenth Century. Spring 1987. Mr. Howell.

A survey of political, cultural, intellectual, social, and economic developments in England from Elizabeth to the death of George III.

223. History of England from 1800 to the Present. Fall 1987. Mr. Howell.

A survey of the cultural, intellectual, political, constitutional, social, and economic development of England.

225. The British Empire and Commonwealth. Fall 1987. Mr. Howell.

An introduction to certain continuous themes in British imperial history with an emphasis on the period from 1783 to the present. The course is comparative in approach and from time to time deals with colonies, empires, and policies of other nations than the British in order to provide a general examination of colonialism, imperialism, race, and overseas settlement.

226. Topics in British Imperial and Commonwealth History. Mr. Howell.

The Evolution of British India. Fall 1986.

Analysis of the British presence in India from the formation of the East India Company until the transfer of power and the creation of dominion status for India and Pakistan. Cultural interactions as well as political and economic relationships are emphasized.

230. Interpretations of American History. Spring 1987. Mr. Levine.

Consideration of four or five topics from the American Revolution to the present, all related to social change. How historians have disagreed with each other, the nature of historical inquiry, and the relationship between past and present. Readings include Hartz, *The Liberal Tradition in America;* Lowi, *The End of Liberalism;* Hamil-

ton, *Report of the National Bank;* and Collingwood, *The Idea of History*. Students read different works on the same subject and in class discuss what ways the historians agree and disagree with each other, and why. Particularly useful for history majors, since there is some explicit concentration on philosophy of history and historiography. Nonmajors may find it useful as a review survey of American history, and for practice in reading analytically and writing critical essays.

231. **Social History of Colonial America, 1607-1763.** Fall 1987. Ms. McMahon.

A study of the founding and growth of the British colonies in North America. Explores the problems of creating a new society in a strange environment; the effects of particular goals and expectations on the development of the thirteen colonies; the gradual transformation of English, African, and Indian cultures; and the later problems of colonial maturity and stability as the emerging Americans outgrew the British imperial system.

233. **American Society in the New Nation, 1763-1840.** Spring 1988. Ms. McMahon.

A social history of the United States from the Revolutionary era through the Age of Jackson. Topics include the social, economic, and ideological roots of the movement for American independence; the struggle to determine the scope of the Constitution and the shape of the new republic; the emergence of an American identity; and the diverging histories of the North, South, and West in the early nineteenth century.

[235. **The American Civil War.**]

236. **American Society and Thought, 1865-1917.** Spring 1987. Mr. Whiteside.

The abrupt change in America after 1865; industrialization, immigration, the growth of cities. Social criticism, reform, education, religion. Some attention paid to literature. An effort to identify points of comparison and contrast between America and other industrializing countries.

237. **Foreign Relations of the United States since 1898.** Fall 1987. Mr. Whiteside.

The changing role of the United States in world affairs. Imperialism and its opponents; the two World Wars; the ambivalent attitudes toward international organizations; hemispheric relations; containment and the cold war; Asian policy; Korea and Vietnam; the Middle East. An effort to determine the interaction between domestic concerns and the conduct of foreign policy.

238. **The United States and Asia since 1789.** Fall 1986. Mr. Whiteside.

The American participation in efforts to "open" China and Japan. Economic activity. The missionaries. Diplomatic contacts. The war with Spain and the acquisition of the Philippines. The Open Door notes. World War I and its Asian sequel in the 1920s. America and the struggle between Nationalists and Communists in China. Pearl Harbor and World War II. Taiwan and mainland China since 1949. America and Japan since the occupation. Korea. Southeast Asia and the Vietnam conflict.

240. **The United States since 1945.** Spring 1987. Mr. Levine.

Consideration of social, intellectual, political, and international history. Topics include the cold war; the survival of the New Deal; the changing role of organized labor; Keynesian, post-Keynesian or anti-Keynesian economic policies; the urban crisis. Readings common to the whole class and the opportunity for each student to read more deeply in a topic of his or her own choice.

244. **The Afro-American in American Society since Emancipation.** Spring 1988. Mr. Levine.

The failure of Reconstruction and its consequences, the development of institutions in the black society, the migration north and its consequences. Consideration of prejudice, discrimination and various types of oppression, resistance, and rebellion. The emotional flavor of oppression and resistance. Readings include Malcolm X's *Malcolm Speaks,* and Margaret Walker's *Jubilee.*

Students who have taken **History 15 (The Civil Rights Movement)** may not take this course for credit.

†245. **Afro-American Religion and Its Music: Redemption Songs.** Spring 1988. Mr. Stakeman.

By focusing on black religious music in the Americas, this course will consider how specific historical contexts have shaped and reflected the development of a distinctly Afro-American church, theology, and folk religion. The course will examine the different interactions of African and European cultures which have produced a variety of Afro-American cultures; the social role of the black minister; the social stratification of black Protestant denominations; the social roles within church services; the social welfare functions of churches; and black millenarianism. Topics will include slavery and the spiritual, the black peasantry and folk blues, urbanization and gospel music, Rastafarianism and reggae.

246. **Women in American History.** Fall 1986. Ms. McMahon.

A social history of American women from the colonial period to the present. Examines the changing roles and circumstances of women in

both public and private spheres, focusing on family responsibilities, paid and unpaid work, education, ideals of womanhood, women's rights, and feminism. Class, ethnic, religious, and racial differences—as well as common experiences—are explored.

248. **Family and Community in American History.** Fall 1986. Ms. McMahon.
An examination of the American family as a functioning social and economic unit within the community from the colonial period to the present. Topics include the purpose of marriage; philosophies of child-rearing; demographic changes in family structure; organization of work and leisure time; relationships between nuclear families and both kinship and neighborhood networks; and the effects of industrialization, urbanization, immigration, and social and geographic mobility on patterns of family life.

†250. **History of Native North Americans.** Fall 1986. Ms. Jones.
Survey of postcontact American Indian history, with focus on Indian perspectives and responses to European expansion. Discussion of distinct culture areas—the Northeast, the Great Plains, the Southeast, the Northwest Coast, the Southwest—in historical context. Special attention to intercultural political and economic complexes such as the seventeenth-century fur trade network, the eighteenth- and nineteenth-century raiding economies of the Southwest, or the late nineteenth-century pan-Indian Ghost Dance movement. Discussion of U.S. Indian policies and the development of the reservation system.

†255. **Modern Latin American History.** Spring 1987. Ms. Jones.
Introduction to history of modern Latin America, with comparative study of underlying institutional structures contributing to contemporary economic, social, and political situations. Student participation determined individually according to interest in specific area or topic. Topics include the debt crisis, democratization, authoritarianism, and revolution, and will be illustrated by study of individual cases, such as Mexico, Argentina, Brazil, and Chile.

†261. **Precolonial Africa: An Introduction to African History.** Fall 1986. Mr. Stakeman.
An introduction to African family, social, and political organization before the advent of colonialism which will explore the roots and complexities of Africa's present economic underdevelopment. Topics will include economic organization in non-capitalist societies, migration as a force in African history, the empires of the ancient Sudan, politics and trade, the slave trade, and European contacts with Africa before colonialism. Recommended for freshmen and other beginning African history students.

†262. **Colonialism in Africa.** Spring 1987. Mr. Stakeman.

Selected topics in the history of Africa since European colonization, including Africa on the eve of colonization, African participation in the advent of colonialism, the economic roots of colonialism, the establishment of colonial rule, African resistance to colonial rule, colonial administration, the emergence of new African political elites, the colonial economy, religious reactions to colonialism, the growth of political nationalism, violence as a political process, decolonization, the concept of underdevelopment, and assessments of colonial experience.

†264. **Islam in Africa.** Fall 1986. Mr. Stakeman.

This course will focus on Islam as a theological system and as an ideology which orders social relations in African societies. The course will place particular emphasis on the role of women in African Islamic societies. Other topics include Islamic diasporas in Africa, the syncretization of African and Islamic beliefs, Islamic minorities in non-Islamic societies, Islam and underdevelopment, Islamic socialisms, and Islam in the modern world.

†270. **Introduction to Chinese Thought.** Fall 1987. Mr. Smith.

An introduction to the competing schools of Chinese thought in the time of Confucius and his successors. Lectures provide background in the developments of Chou dynasty society (ca. 1000-222 B.C.), but most work takes place in conference discussions of the philosophers' original texts and in a series of related short papers.

†273. **Sages and Bureaucrats: An Introduction to Neo-Confucian Thought.** Fall 1986. Mr. Cheek.

An introduction to two important revisions of Confucian doctrine, first in the eleventh and twelfth centuries and then in the sixteenth century. Our goal is to discover how leading thinkers and public servants reinterpreted classical Confucian thought, how they responded to the challenge of Buddhism, and how they balanced two main goals of Confucian thought: self-cultivation and public service. Lectures provide background in the development of Song and Ming dynasty society, but most work takes place in conference discussions of the philosophers' original texts and in a series of short papers.

†274. **Chinese Society in the Ch'ing.** Spring 1987. Mr. Smith.

An introduction to premodern China, focusing on the first half of the Ch'ing dynasty (1644-1911). Discussion of societal relations and their justifications: state organization, human interaction, ideology. Culminates in a day-long simulation of elite society in the eighteenth century, with students taking roles from merchant and local gentry to magistrate and emperor.

†275. **Modern China.** Fall 1986. Mr. Cheek. Fall 1987. Mr. Smith.
China from 1800 to the present with an emphasis on social and intellectual history. Studies the confrontation with Western imperialism, the fall of empire, the Republican period and rise of Communism, and the People's Republic.

†278. **The Foundations of Tokugawa Japan.** Spring 1988. Mr. Smith.
Addresses problems in the creation and early development of Tokugawa (1600-1868) state and society: the transformation of samurai from professional warriors to professional bureaucrats, the Confucian challenges to Buddhism, and the unanticipated growth of a quasi-autonomous urban culture.

†279. **The Emergence of Modern Japan.** Spring 1987. Mr. Cheek.
An introduction to Japanese history from the late Tokugawa period (mid-nineteenth century) to the present, the transformation of feudal Japan into a modern industrial nation. In particular, the roots of Japanese fascism leading to World War II and the way Japan managed to recover so rapidly from the war.

Problems Courses

Courses 300 through 373 involve the close investigation of certain aspects of the areas and periods represented. Following a reading in and a critical discussion of representative primary and secondary sources, students develop specialized aspects as research projects, culminating in oral presentations and written essays. Adequate background is assumed, the extent of it depending on whether these courses build upon introductory courses found elsewhere in the history curriculum. Enrollment in these courses requires the consent of the instructor.

Problems in Early European History.

300. **The Social History of the Reformation.** Fall 1986. Mr. Nyhus.
A research seminar on the social structures of Germany, France, and Switzerland in the early sixteenth century together with a study of the program of the reformers and the reasons for the popular reception of that program.

Problems in Modern European History.

310. **Nazi Germany Why?** Spring 1987. Mr. Karl.
No prior knowledge of German history is expected. Preference given to juniors and seniors from any department.

Problems in British History.

320. **The English Revolution.** Spring 1987. Mr. Howell.
The English revolution of the seventeenth century with particular attention to conflicting models of the causes and course, the conflict between the search for order and left-wing demands for reform, and the place of the revolution within the context of the European revolutionary tradition.

321. **Britain in the Twentieth Century.** Spring 1988. Mr. Howell.
A research seminar on the changing condition of Britain since 1914. Particular emphasis on changing conceptions of the role of the state, the process of loss of empire, the Irish problem, stresses within contemporary British society, and the cultural response to changing conditions.

Problems in American History.

330. **Conservative and Liberal in Twentieth-Century America.** Fall 1987. Mr. Levine.
What have the two words meant, ideologically and programmatically, in changing contexts? Students explore the background of their own ideas, and of ideas with which they disagree. The course taught almost entirely through student research in primary sources.

331. **A History of Women's Voices in America.** Spring 1988. Ms. McMahon.
An examination of women's voices in American history: private letters, journals, and autobiographies; short stories and novels; advice literature; essays and addresses. Research topics focus on the content and form of the writing as it illuminates women's responses to their historical situation.
Prerequisite: **History 246** and 248 or consent of the instructor.

332. **The Community in Colonial America.** Spring 1988. Ms. McMahon.
Examination of the ideals and realities of community in early America. Research topics focus on religious belief, political ideology, economic development, and social structure as determinants of community organization in New England, the Middle Colonies, and the South.

333. **The United States and Asia since 1850.** Spring 1987. Mr. Whiteside.
Research topics concerning individuals, issues, and interpretive problems in the American relations with East and Southeast Asia. Departmental approval is required if a student wishes to count this problems course toward an East Asian Studies concentration.

334. **The Growth of the Welfare State in Britain and the United States 1834-1890.** Fall 1986. Mr. Levine.
A study in comparative history of the ideology and institutions of

welfare state in two countries which are similar in some ways but quite different in others. Readings in the laws, legislative debates, ideological statements, and economic and sociological analyses. Vigorous class participation and several small papers required, plus one longer research project.

Problems in Latin American History.

†350. **Latin American Revolutions.** Fall 1986. Ms. Jones.

Study of social unrest, conflicts, revolts, and revolution in twentieth-century Latin America. Research topics include the Mexican, Bolivian, Cuban, and Central American revolutions. Special focus on theories and models of revolution as applied to the Latin American experience.

Problems in African History.

360. **Social Issues in African Literature.** Spring 1988. Mr. Stakeman.

During the colonial and post-colonial periods, Africa developed an important, innovative, and varied literature that expresses the concerns of its authors in imaginative and often strikingly beautiful ways. An examination of this literature from the viewpoints of history, sociology, and politics rather than that of literary analysis. Literary criticism as well as plays, poetry, short stories, and novels are read. The first part of the course features discussion of the oral literature tradition in Africa, the role of the writer in African society, the romanticization of the past, the role of women in literature, and the strains of post-colonial society. The second part of the course explores themes, authors, or genres of particular interest through research projects.

361. **The Afro-American Critique of America.** Spring 1987. Mr. Stakeman.

Afro-Americans have had to confront American racism for three centuries. Their perceptions of America, the "Negro problem," and strategies for the improvement of black life have spanned the radical/liberal/conservative political spectrum. This course will ask students to read and analyze the writings of black intellectual activists including black abolitionists (Frederick Douglass), black progressives (Booker T. Washington, W. E. B. Du Bois, Marcus Garvey), literary activists (James Weldon Johnson, Langston Hughes, Zora Neale Hurston), civil rights era activists (Martin Luther King, Malcolm X, the Black Panther Party), and post-civil rights theorists (Manning Marable and Thomas Sowell).

[362. **History Workshop Problems Seminar.**]

[363. **Contemporary Problems in Contemporary Literature.**]

Problems in Asian History.

†370. **Intellectuals and Chinese Communism: To Serve the People.** Spring 1987. Mr. Cheek.

The responses of twentieth-century Chinese intellectuals to the introduction of Marxism and Marxism-Leninism, the different ways they tried to serve the people of China by serving the Chinese Communist Party, and the tragic problems they have confronted in these efforts. Surveys representative intellectuals from the Republic, World War II, the early People's Republic and the post-Mao period. Students will choose one individual or problem for a substantial term paper.

†371. **Problems in the History of Zen Buddhism.** Spring 1988. Mr. Smith.

The growth of Zen in China from Indian Buddhism and indigenous roots; its development into the major schools. Role of Dogen Zenji in its spread to Japan. Relationship to medieval Japanese state institutions and eventual decline in the Tokugawa period. Addresses the claims and compatibility of both historical and experiential perspectives.

Prerequisite: Course work in East Asian history or religion and consent of the instructor.

290. **Intermediate Independent Study.** The Department.

400. **Advanced Independent Study and Honors.** The Department.

451, 452. **Honors Seminar.** Every year. The Department.

Independent Language Study

The study of languages for which regular course offerings are not available may be undertaken through a program of independent study. This program is available only to students who have a high motivation to pursue guided self-instruction in a language, who have demonstrated a high degree of competence in learning a language, and for whom the language undertaken is particularly relevant to academic or professional goals. The program allows students to begin a language and to achieve a mastery of its basics but does not offer instruction beyond the beginning level. Students who wish to go beyond this level are advised to seek more advanced instruction elsewhere during summer sessions or through exchange programs.

Responsibility for the Independent Language Study Program rests with the chairmen of the Departments of German, Romance Languages, and Russian for the language which falls into the families of Germanic, Romance, or Slavic languages, respectively. Languages outside these categories may be arranged if a faculty member in any department can be found willing to accept responsibility under the criteria here outlined. Interested students who meet the criteria should consult the appropriate faculty member as early as

possible prior to the semester in which the study of the language is to begin.

In addition the following courses are a regularly offered part of the curriculum.

Chinese 101. Beginning Chinese. Every fall. Ms. Chen.

An introduction to Putonghua (Mandarin) and the written language. Three class hours per week plus two hours of drill. Assigned language laboratory. Enrollment limited to fifteen.

Chinese 102. Beginning Chinese. Every spring. Ms. Chen.

Continuation of **Chinese 101.** Enrollment limited to fifteen.

Chinese 203. Intermediate Chinese. Every fall. Ms. Chen.

A continuation of **Chinese 102.** Three class hours per week plus additional hours with Chinese teaching fellow.

Chinese 204. Intermediate Chinese. Every spring. Ms. Chen.

A continuation of **Chinese 203.**

Japanese 101. Beginning Japanese. Every fall.

An introduction to standard modern Japanese—speaking, aural comprehension, reading, and writing. Three class hours per week plus assigned language laboratory at Bowdoin.

Japanese 102. Beginning Japanese. Every spring.

Continuation of **Japanese 101.**

Japanese 203. Intermediate Japanese. Every fall.

A continuation of **Japanese 102.** Three class hours per week, plus assigned language laboratory at Bowdoin.

Japanese 204. Intermediate Japanese. Every spring.

A continuation of **Japanese 203.**

Note: Japanese is taught at Bates College in Lewiston and is open to a maximum of five Bowdoin students. Assistance with transportation is provided.

Interdisciplinary Courses

Interdisciplinary courses offer students an opportunity to consider topics of interest to several departments from their disciplinary perspectives. Inquiries about the relation of these courses to a major program should be addressed to the appropriate department.

German 52. Myth and Heroic Epic of Europe. Spring 1988. Mr. Hodge.

See page 142.

History 220. The British Experience. Fall 1986. Mr. Howell.

See page 154.

†**History 270. Introduction to Chinese Thought.** Fall 1987. Mr. Smith.
See page 158.

†**History 273. Sages and Bureaucrats: An Introduction to Neo-Confucian Thought.** Fall 1986. Mr. Cheek.
See page 158.

†**History 370. Intellectuals and Chinese Communism: To Serve the People.** Spring 1987. Mr. Cheek.
See page 162.

†**History 371. Problems in the History of Zen Buddhism.** Spring 1988. Mr. Smith.
See page 162.

Music 111. Giuseppe Verdi. Spring 1987. Mr. Beckwith (Music) and Mr. Cerf (German).
See page 174.

Interdisciplinary Majors

A student may, with the approval of the departments concerned and the Recording Committee, design an interdisciplinary major to meet an individual, cultural, or professional objective.

Bowdoin has five interdisciplinary major programs that do not require the approval of the Recording Committee because the departments concerned have formalized their requirements. They are in art history and archaeology, art history and religion, chemical physics, geology and physics, and mathematics and economics. A student wishing to pursue one of these majors needs the approval of the departments concerned.

Art History and Archaeology

Requirements:

1) **Art 101, 212, 222,** and one of **Art 302** through **388; Archaeology 101, 102, 301, 302, 303,** and **305.**

2) Any two art courses numbered **10** through **388.**

3) One of the following: **Classics 51, 290** (Independent Study in Ancient History); **History 201; Philosophy 111; Religion 240.**

4) Either **Art 400** or **Classics 400** (Independent Study in Archaeology).

Art History and Religion

Requirements:

1) **Art 101; Religion 101.**

2) Option A or B.

Option A: **Art 212** and **222, Religion 240,** and any one of **Religion 200** through **219.**

Option B: **Art 242** and **252, Religion 241,** and any one of **Religion 200** through **219.**

3) Electives: in art history one course from the option group not chosen, and one from those numbered 302-388. In religion, one course from those numbered 220-239 and a senior independent study which incorporates art history and religion.

Chemical Physics

Requirements:

1) **Chemistry 101, 102, 251; Mathematics 161, 171,** and **181** or **223; Physics 103, 227, 300.**

2) Either **Chemistry 252** or **Physics 310.**

3) Three courses from **Chemistry 252, 310, 330, 350, 401, 402; Physics 223, 229, 310, 320, 350, 401, 402.** At least two of these must be below the 200 level.

4) A working knowledge of computer language; this may be satisfied by **Computer Science 100, Mathematics 244,** or a demonstrated competence.

Geology and Physics

Requirements:

1) **Chemistry 101, 102; Geology 101, 102, 241, 262; Mathematics 161, 171; Physics 103, 223, 227.**

2) Either **Physics 255** or **300.**

3) Two additional courses in geology and/or physics.

Mathematics and Economics

Requirements:

1) Seven or eight courses in mathematics as follows: **Mathematics 181;** either **Mathematics 222** and **Computer Science 100,** or **Mathematics 244** or **264; 225; 224; 249; 265;** either **223** or **263** or **304.**

2) Seven courses in economics as follows: **Economics 101, 102, 255, 256, 316,** and two electives numbered 200 or above. One elective may be an independent study in an appropriate topic.

Mathematics

Professor Ward, *Chairman;* Professors Grobe and Johnson; Associate Professors Barker and Fisk; Assistant Professors Ong, Roberts, and Wood; Visiting Assistant Professor Vella

Requirements for the Major in Mathematics: A major consists of at least eight courses numbered **222** or above, including at least one of the following: **Mathematics 262, 263, 286,** or a course numbered in the 300s.

A student must submit a major program to the department at the time that he or she declares a major. That program should include courses in which the emphasis is primarily theoretical and courses in which applications are stressed. A student's major program may be changed later with the approval of the departmental advisor.

All majors should take basic courses in algebra (e.g., **Mathematics 222** or **262**) and in analysis (e.g., **Mathematics 223** or **263**). The department also encourages all majors to complete at least one sequence in a specific area of mathematics. Those areas are: algebra (**Mathematics 222, 262,** and **302**); analysis (**Mathematics 243, 263,** and **303**); applied mathematics (**Mathematics 224, 264,** and **304**); probability and statistics (**Mathematics 225, 265,** and **305**); and topology (**Mathematics 263, 286,** and **306**). In exceptional circumstances, a student may substitute a quantitative course from another department for one of the eight mathematics courses required for the major. Such a substitution must be approved in advance by the department.

Majors who have demonstrated that they are capable of intensive advanced work are encouraged to undertake independent study projects. With the prior approval of the department, such a project counts toward the major requirement and may, in exceptional cases, lead to graduation with honors in mathematics.

Requirements for the Minor in Mathematics: A minor in mathematics consists of a minimum of four courses numbered 222 or above, at least one of which must be numbered 262 or above.

Interdisciplinary Major: The department participates in an interdisciplinary program in mathematics and economics. See page 165.

Listed below are some of the courses recommended to students contemplating various options in mathematics.

For secondary-school teaching: **Computer Science 100, Mathematics 222, 225, 242, 247, 262, 263, 288, 289.**

For graduate study: **Mathematics 222, 223, 243, 262, 263, 286,** and at least one course numbered in the 300s.

For engineering, operations research, and applied mathematics: **Mathematics 223, 224, 225, 243, 244, 248, 249, 264, 265, 288, 304, 305.**

For mathematical economics and econometrics: **Mathematics 222, 223** or **263, 225, 244, 248, 249, 265, 288, 305,** and **Economics 316.**

For computer science: **Computer Science 100, Mathematics 222, 225, 228, 244, 248, 249, 262, 265, 288, 289.**

50. Topics in Mathematics. Every spring. Mr. Fisk.

This course is designed for students who wish to learn something about the spirit of modern mathematics and who do not plan to take other mathematics courses. The emphasis is on the history and origins of mathematical problems; the development of the ideas, language, and symbolism needed to deal with those problems; and the ramifications

and applications of the theory to current quantitative problems in a variety of disciplines. Topics are chosen from geometry, number theory, probability, game theory and optimization, graph theory, topology, and computing.

60. Introduction to College Mathematics. Every fall. Mr. Ward.

Material selected from the following topics: combinatorics, probability, modern algebra, logic, linear programming, and computer programming. This course, followed by **Mathematics 161,** is intended as a one-year introduction to mathematics and is recommended for those students who intend to take only one year of college mathematics.

70. Elementary Probability and Statistics. Spring 1988. Mrs. Roberts.

Course material is divided between probability and statistics. Probability topics may include basic axioms, combinatorics, conditional probability, independence, discrete and continuous random variables, mean, variance, and expected value. Topics in statistics may include descriptive statistics, random samples, sample mean, sample variance, point estimates, confidence intervals, and hypothesis testing.

Prerequisite: **Mathematics 161.**

161. Differential and Integral Calculus I. Every semester. The Department.

An introduction to limits; the derivatives of rational functions and roots of rational functions; the chain rule; the derivatives of the trigonometric functions; applications of the derivative to curve sketching; the Mean Value theorem; integration of algebraic functions; areas between curves.

Mathematics 161 may be taken as either a lecture or a self-paced course in the fall semester, but only as a self-paced course in the spring semester.

Open to students whose secondary school background has included at least three years of mathematics.

171. Differential and Integral Calculus II. Every semester. The Department.

Techniques of integration; the logarithmic and exponential functions; the inverse trigonometric functions; applications of the integral; improper integrals; series, including Taylor's theorem and differentiation and integration of power series.

Mathematics 171 may be taken as either a lecture or a self-paced course.

Prerequisite: **Mathematics 161** or equivalent.

181. Multivariate Calculus with Linear Algebra. Every semester. The Department.

Multivariate calculus in two and three dimensions, and an introduction to linear algebra. The calculus topics include: vector geometry and

the calculus of curves; differentiation; the partial derivatives of real-valued functions, the gradient, directional derivatives, approximations using the tangent plane, and applications to extremal problems; multiple integration in two and three dimensions. The linear algebra topics include: an introduction to vector spaces, with an emphasis on R^n, and the concept of dimension. Matrix algebra and Gaussian elimination are covered as time permits. Applications from the physical and the social sciences are discussed as time permits.

Mathematics 181 may be taken as either a lecture or a self-paced course.

Prerequisite: **Mathematics 171** or equivalent.

195. **Applied Multivariate Statistics.** Every other spring. Spring 1987. Mr. Fisk.

An introduction to the techniques of applied multivariate analysis based on matrix algebra and the multivariate normal distribution. Techniques to be discussed may include discriminant analysis, principal components, factor analysis, canonical correlations, multidimensional scaling, classification trees, and graphic techniques. These techniques are useful in many disciplines such as biology, psychology, and sociology. Students will learn how to run and interpret the output from SPSS, BMDP, and other statistical packages.

Prerequisites: **Mathematics 161** and a college-level statistics course.

222. **Vector Geometry and Linear Algebra.** Every fall. Fall 1986. Mr. Ward.

Topics include vectors, matrices, determinants, vector spaces, inner product spaces, linear transformations, eigenvalues and eigenvectors, and quadratic forms. Applications to linear equations, conics, quadric surfaces, and n-dimensional geometry.

Prerequisite: **Mathematics 181** or consent of the instructor.

223. **Calculus of Vector Functions.** Every fall. Fall 1986. Mr. Wood.

The basic concepts of multivariate and vector calculus. Topics include continuity; the derivative as best affine approximation; the chain rule; Taylor's theorem and applications to optimization; Lagrange multipliers; multiple integration and change of variables; line and surface integration; gradient, divergence, and curl; conservative and solenoidal vector fields; theorems of Green, Gauss, and Stokes. Applications from economics and the physical sciences are discussed as time permits.

Prerequisite: **Mathematics 181.**

224. **Methods of Applied Mathematics I.** Every year in alternate semesters. Spring 1987. Mr. Ong.

An introduction to the theory of ordinary differential equations with diverse applications to problems arising in the natural and social

sciences. Emphasis is placed upon the rigorous development of the different methods of solution. Topics include first-, second-, and higher-order equations with applications in qualitative stability and oscillation theory, Laplace transforms, series solutions, and the existence and uniqueness theorems. A few numerical methods sporadically introduced during the course. Knowledge of BASIC, FORTRAN, or PASCAL is helpful.

Prerequisite: **Mathematics 181,** or concurrent registration in **181.**

225. **Probability.** Every fall. Fall 1986. Mrs. Roberts.

A study of the mathematical models used to formalize non-deterministic or "chance" phenomena. General topics include combinatorial models, probability spaces, conditional probability, discrete and continuous random variables, independence and expected values. Specific probability densities such as the binomial, Poisson, exponential, and normal will be discussed in depth.

Prerequisite: **Mathematics 181.**

228. **Discrete Mathematical Structures.** Every spring. Mr. Johnson.

An introduction to logic, reasoning, and the discrete mathematical structures which are important in computer science. Topics include propositional logic, types of proof, induction and recursion, sets, counting, functions and relations, graphs, and program correctness.

Prerequisite: Any mathematics course numbered 60 or above, or consent of the instructor.

242. **Number Theory.** Every other spring. Spring 1988. Mr. Johnson.

A standard course in elementary number theory which traces the historical development and includes the major contributions of Euclid, Fermat, Euler, Gauss, and Dirichlet. Prime numbers, factorization, and number-theoretic functions. Perfect numbers and Mersenne primes. Fermat's theorem and its consequences. Congruences and the law of quadratic reciprocity. The problem of unique factorization in various number systems. Integer solutions to algebraic equations. Primes in arithmetic progressions. An effort is made to collect along the way a list of unsolved problems.

243. **Functions of a Complex Variable.** Every other spring. Spring 1987. Mr. Barker.

The differential and integral calculus of functions of a complex variable. Cauchy's theorem and Cauchy's integral formula, power series, singularities, Taylor's theorem, Laurent's theorem, and the residue calculus, harmonic functions, and conformal mapping.

Prerequisite: **Mathematics 181, 223,** or consent of the instructor.

244. **Numerical Analysis.** Spring 1987. Mr. Barker.

An introduction to the numerical solutions of mathematical problems. Topics include computational aspects of linear algebra, approximation theory, numerical differentiation and integration, and numerical methods for differential equations. Students are required to develop computer software for the topics covered; therefore, previous exposure to computer programming is useful. An extra hour of instruction in FORTRAN will be scheduled each week for students without prior exposure to this programming language.

Prerequisite: **Mathematics 181, 222,** or consent of the instructor.

247. **Geometry.** Every other spring. Spring 1988. Mr. Fisk.

Primarily a course in advanced analytic geometry of two and three dimensions. Analysis of plane curves. Cross-ratio; poles, polars, and diameters of conics. Formal reduction of the second-degree equations of curves and surfaces using matrix algebra. Homothetic and Moebius transformations; the Euler Line and related triangle properties. Theorems of Menelaus, Ceva, Desargues, and Pascal.

Prerequisite: **Mathematics 181** or **222.**

248. **Nonnumeric Algorithms.** Every other fall. Fall 1986. Mr. Fisk.

The mathematical theory of nonnumeric algorithms. Sorting and searching, worst case analysis of algorithms, graph theory algorithms, and algorithms for parallel computers. Students are required to program and run short computer programs.

Prerequisite: **Mathematics 181, Computer Science 100,** or consent of the instructor.

249. **Linear Programming and Optimization.** Every other fall. Fall 1986. Mr. Johnson.

A survey of some of the mathematical techniques for optimizing various quantities, many of which arise naturally in economics and, more generally, in competitive situations. Production problems, resource allocation problems, transportation problems, and the theory of network flows. Game theory and strategies for matrix games. The emphasis is on convex and linear programming methods, but other nonlinear optimization techniques are presented. The course includes computer demonstrations of many of the techniques that are discussed.

Prerequisite: **Mathematics 181.**

262. **Introduction to Algebraic Structures.** Every year in alternate semesters. Spring 1987. Mr. Ward.

A study of the basic arithmetic and algebraic structure of the common number systems, polynomials, and matrices. Axioms for groups, rings, and fields, and an investigation into general abstract systems

which satisfy certain arithmetic axioms. Properties of mappings which preserve algebraic structure.

Prerequisite: **Mathematics 222.**

263. **Introduction to Analysis.** Every year in alternate semesters. Fall 1986. Mr. Barker.

An introduction to the theory of functions of one real variable. A major goal is the rigorous development of the foundations of calculus. Topics include the completeness and topological properties of the real numbers, metric spaces, sequences, continuity, uniform continuity, differentiability, and Riemann integration. Additional topics may be chosen from the following: series convergence, uniform convergence, Taylor series, and properties of transcendental functions. The course also serves as an introduction to rigorous mathematical proof.

Prerequisite: **Mathematics 171.**

264. **Methods of Applied Mathematics II.** Every other spring. Spring 1988. Mr. Ong.

A continuation of **Mathematics 224.** Topics include the applications of linear algebra and vector analysis to the solutions of systems of first-order linear differential equations, stability of linear systems, Green's functions and inhomogeneous equations, non-linear equations with emphasis on stability of equilibria, perturbation theory, and a few numerical methods. Knowledge of a programming language is helpful.

Prerequisite: **Mathematics 224.**

265. **Statistics.** Every spring. Spring 1987. Mrs. Roberts.

An introduction to the fundamentals of mathematical statistics. General topics include likelihood methods, point and interval estimation, and tests of significance. Applications include inference about binomial, Poisson, exponential models, frequency data, and analysis of normal measurements.

Prerequisite: **Mathematics 181** and **225.**

[279. **History of Modern Mathematics.**]

286. **Topology.** Fall 1987. Mr. Johnson.

An introduction to both point-set and geometric topology centered on the fundamental notion of topological space and continuous function. Topics include fundamentals of point-set topology with special emphasis on homeomorphisms, compactness, connectedness, and separation. Geometric applications include fixed point theorems, surfaces, covering spaces, the Jordan curve theorem, and an introduction to knots and links.

Prerequisite: **Mathematics 263** or consent of the instructor.

287. **Advanced Topics in Geometry.** Spring 1987. Mr. Fisk.

One or more selected topics from differential geometry, algebraic geometry, or projective and metric geometry. The topic is usually differential geometry with an emphasis on those geometric properties of curves and surfaces which can be investigated using the techniques of calculus.

Prerequisite: **Mathematics 223.**

288. **Combinatorics and Graph Theory.** Spring 1987. Mr. Fisk.

An introduction to combinatorics and graph theory. Topics to be covered may include enumeration, matching theory, generating functions, and partially ordered sets. Applications cover Latin squares, designs, computer science, and graph algorithms.

Prerequisite: **Mathematics 171.**

289. **Topics in Set Theory and the Foundations of Mathematics.** Every other fall. Fall 1987. Mr. Fisk.

One or more topics selected from the general area of set theory, logic, and the foundations of mathematics. Recent courses have dealt with logic and computability theory, formal language theory, countability and diagonalization, Turing machines and various kinds of computability, recursive functions, Hilbert's Tenth Problem, undecidability, and incompleteness.

Prerequisite: At least two years of college mathematics or consent of the instructor.

302. **Advanced Topics in Algebra.** Every other spring. Spring 1988. Mr. Ward.

One or more specialized topics from abstract algebra and its applications.

Prerequisite: **Mathematics 262,** or **Mathematics 222** and consent of the instructor.

303. **Advanced Topics in Analysis.** Every other spring. Spring 1987. Mr. Barker.

One or more selected topics from analysis. Topics may be chosen from Lebesgue integration, general measure and integration theory, Fourier analysis, Hilbert and Banach space theory, and spectral theory.

Prerequisite: **Mathematics 263.**

304. **Methods of Applied Mathematics III.** Every other fall. Fall 1986. Mr. Ong.

One or more selected topics in applied mathematics. Material selected from the following: Fourier series, partial differential equations, integral

equations, calculus of variations, bifurcation theory, asymptotic analysis, applied functional analysis, and topics in mathematical physics.

Prerequisite: **Mathematics 264.**

305. Topics in Probability and Statistics. Spring 1988. Mrs. Roberts.

One or more specialized topics from probability and statistics. Recent topics have been: linear regression analysis, multivariate analysis, nonparametric statistics, and stochastic processes.

Prerequisites will depend on the topic but will usually include **Mathematics 265** or consent of the instructor.

[306. Topics in Topology.]

290. Intermediate Independent Study. The Department.

400. Advanced Independent Study and Honors. The Department.

Music

Professor Beckwith, *Chairman,* Fall 1986; Professor Schwartz, *Chairman,* Spring 1987; Assistant Professors Greenlee, McCalla, and Munn; Visiting Lecturer Pepe; Director of Chorale McGee

Requirements for the Major in Music: Music 50 and **Music 51** are prerequisite for entrance to the major. Prospective majors can waive either or both of these courses by examination; otherwise they are urged to take either or both of the courses during their freshman year.

The required courses are **Music 230, 231, 300,** and **301;** three courses chosen from **Music 101, 302, 303, 304, 305;** and three semester courses chosen with the approval of the department. No more than one course (i.e. two semesters) of performance studies will be included in the latter category toward fulfillment of the major. Students planning to take graduate degrees in music should take courses in theory, history, and literature beyond the minimum major requirements, if possible, and must demonstrate facility at the keyboard.

Requirements for the Minor in Music: Music 50, Music 230 (with **Music 51** as prerequisite, or passed by waiver), and three additional semester courses in music.

All students majoring or minoring in music are expected to participate in at least one regularly rehearsing departmental ensemble for at least one year.

50. Introduction to Music. Fall 1986. Mr. McCalla.

For students with little or no previous training in music. Ability to read music or play an instrument is not necessary. The essentials of

music—sound and time—are studied as they have been used in different periods and in the context of musical forms. Listening materials are drawn from a variety of sources: early Western music, Western music from the baroque through romantic eras, and twentieth-century music.

51. Introduction to the Structure of Music. Every spring. Mr. Greenlee.

For students with little or no previous training in music. A study of the organizational principles inherent in various pitch systems (scales, modes) and rhythmic systems, with emphasis on the notation of these in written symbols. Such concepts as tonality, transposition, modulation, basic harmonic motion, and simpler forms will be introduced. Aural dictation, keyboard application, and development of fluency in notation are stressed.

The sequence **Music 50, 51** is recommended for the student desiring a broad, comprehensive introduction to the field of music.

[100. World Musics.]

101. Contemporary Music. Spring 1987. Mr. Schwartz.

A survey of music beginning with the late nineteenth century (Wagner, Mahler) and continuing to the present avant-garde. Impressionism, the 12-tone school, the neoclassic movement, and recent developments in electronic, serial, "chance," and collage techniques will be discussed. Special attention devoted to Stravinsky, Schoenberg, Ives, and Cage. Ability to read music is not necessary.

110-111. Topics in Music History and Literature.

Music 110 and **111** are topics courses in specific aspects of music history and literature, designed for students with little or no background in music. Course titles and content may change every semester.

110. Piano Music Since Mozart. Fall 1986. Mr. McCalla.

A survey of the principal literature for the piano—primarily solo and concerto, but with some attention to chamber music and vocal music—from the late eighteenth century to the present. The main emphasis will be on musical styles, but there will also be some discussion of the development of the instrument, changes in the technical demands on the player, and "extended" conceptions of the piano and piano writing in the twentieth century.

111. Giuseppe Verdi. Spring 1987. Mr. Beckwith, Mr. Cerf (German).

A study of the artistic development of Giuseppe Verdi as Italy's greatest nineteenth-century operatic composer. A chronological overview spanning thirty-five years and analyzing four major works from musical and dramatic perspectives: *Rigoletto* (1851), *La Traviata* (1853), *Don Carlos* (1867), and *Otello* (1887).

230, 231. Elementary Materials of Music. Ms. Munn.

Elementary harmony and analysis, primarily of eighteenth- and nineteenth-century music. Ear training, dictation, and fluency of notation are stressed. There are three class hours plus two laboratory hours weekly.

Prerequisite: **Music 51** or equivalent.

[**282. Electronic Music: Techniques and Composition.**]

284. The American Musical Theater. Fall 1986. Mr. Pepe.

A study of the American musical theater as an integration of Western music from early Greece through the Renaissance to contemporary voices. A chronological survey of historical, social, and economic experience of American Indians, Pilgrims, Black Americans, and immigrants. Their church music and folk music became the underlying themes of present-day theater, song, television, and film.

300, 301. Advanced Materials of Music. Mr. Beckwith, Mr. McCalla.

A continuation of **Music 230, 231** with increasing stress upon the development of skills in analysis. **Music 300** concentrates upon chromatic harmony, and the practice of counterpoint in Renaissance and baroque styles. **Music 301** concentrates upon twentieth-century styles and analysis of large forms.

Prerequisite: **Music 230, 231.**

Music History, Literature, and Analysis

Courses **302** through **305** are studies of music literature from the viewpoint of historical development and the analysis of style and form. Intended primarily for majors in music, they need not be taken in chronological order.

Prerequisite: **Music 50** or the equivalent; **Music 231** or concurrent registration in **Music 231.**

302. Medieval and Renaissance Music (up to 1600). Fall 1986. Mr. Greenlee.

303. Baroque and Preclassic (1600-1750). Spring 1987. Mr. McCalla.

304. Classic and Early Romantic (1750-1850). Fall 1987.

305. Romanticism and Early Twentieth Century (1850-1950). Spring 1988.

306. Orchestration. Fall 1987.

Transcription, arrangement, and free composition for ensembles of stringed, woodwind, and brass instruments, voice(s) and piano, the primary aim being that of effective instrumentation. Intensive study of orchestral and chamber scores, drawn from the music literature.

Prerequisite: **Music 230, 231** or equivalent.

307. Composition. Spring 1987. Mr. Schwartz.

Free composition for the ensemble combinations cited previously in **Music 306,** with the emphasis upon creative work in the more traditional forms (rondo, variation, sonata-allegro) and a variety of experimental techniques.

Prerequisite: **Music 230, 231** or consent of the instructor.

308. Performance Practice. Spring 1988. Mr. Greenlee.

The study of the process that transforms notation into music. Embellishment, tempo rubato, dynamic nuance, and other aspects of phrasing and improvisation are discussed in historical perspective. Research projects may include the study of an early-music instrument or a public performance.

Prerequisite: **Music 231** and consent of instructor.

310. Advanced Topics in Music Literature.

Three Great Requiems. Fall 1986. Mr. Beckwith.

The Mozart Requiem Mass in D Minor, the Brahms *Ein Deutsches Requiem,* and the Verdi *Manzoni Requiem* will be considered in their musical, religious, and historical contexts. Textual as well as musical problems will be considered.

Prerequisite: A previous course in music history or consent of the instructor.

Performance Studies

Not more than six credits of individual performance and ensemble courses together may be taken for graduation credit. For administrative purposes, applied music and ensemble study will bear one of the course numbers 235 through 249, 251 through 288, depending on the number of semesters of such work the individual student has taken.

Instructors in 1985-1986 included Julia Adams (viola), Naydene Bowder (piano), Stefani Burk (oboe), Robert Charest (jazz piano), Ben Clinesmith ('cello), Kathleen Clinesmith (clarinet, saxophone), Judith Cornell (voice), William Eves (piano), Kathy Iovieno (flute), Christopher Kane (guitar), Stephen Kecskemethy (violin), Dale Perkins (trumpet), Elizabeth Sollenberger (organ).

235-249. Individual Performance Studies. Every year.

The following provisions govern applied music:

1. Necessary for admission are two courses from the following: **Music 50, 51, 100, 101, 110, 111, 230, 231,** and **282.** These may be taken concurrently with the first two semesters of performance studies **(Music 235, 236).**

2. Individual performance courses are intended for the continued

study of an instrument with which the student is already familiar. Students may enroll only with the consent of the department. Students must take at least two consecutive semesters of study on the same instrument to receive any credit.

Admission is by audition only. Only students who are intermediate or beyond in the development of their skills are admitted.

At the end of the first year each student is critically reviewed by members of the department. Permission to continue is granted on the basis of seriousness of intent, attendance, rate of progress, etc.

At the end of the fourth semester each student is again reviewed critically. Only exceptional students are granted permission to continue beyond this point. Musicianship, talent, and general stage of development are the important factors. The same applies to the end of the sixth semester. At the end of the sixth and eighth semesters a student is expected to present a formal public recital of at least forty-five minutes' duration.

During the first four semesters a student is expected to perform in public with reasonable frequency. The student may be called upon to play for the music faculty from time to time.

3. One half credit is granted for each semester of study. There must be two successive semesters of study on the same instrument.

4. The student pays a fee of $145.00 for each semester of study. In some cases the student may have to travel off campus to receive instruction. Instruction is offered as available on orchestral and chamber instruments for which a significant body of written literature exists. Normally, instruction is available in flute, oboe, clarinet, bassoon, saxophone, trumpet, trombone, violin, viola, 'cello, harpsichord, organ, piano, guitar, and voice.

251-288. Ensemble Performance Studies. Every year.

The following provisions govern ensemble:

1. Ensemble music courses are intended to provide a student with experience in group music making. Students are admitted to an ensemble class only with the consent of the department and, for those enrolled in chamber ensembles, upon the formation of a specific chamber group.

2. One half credit is granted for each semester of study.

3. Ensembles will include at least the following: 251-278, chorale; 261-268, orchestra; 271-278, chamber choir; 281-288, chamber ensembles.

4. Grade will be credit or fail.

5. Ensembles meet regularly for a minimum of two hours weekly. Chamber ensembles are offered only as instruction is available.

6. Each ensemble will perform in public.

290. Intermediate Independent Study. The Department.

400. Advanced Independent Study and Honors. The Department.

Philosophy

Professor McGee, *Chairman;* Professor Pols; Associate Professor Corish; Assistant Professor Coleman

Requirements for the Major in Philosophy: The major consists of eight courses, which must include **Philosophy 111, 112,** and **200,** at least two other courses from the group numbered in the 200s and two from the group numbered in the 300s. The remaining course may be from any level.

Requirements for the Minor in Philosophy: The minor consists of four courses, which must include **Philosophy 111** and **112** and one course from the group numbered in the 200s. The fourth course may be from any level.

Freshman Seminars

Enrollment is limited to sixteen for each seminar; freshmen are given first preference for the available places; sophomores are given second preference; if there are any remaining places upperclassmen may be admitted with consent of the instructor.

Topics change from time to time but are restricted in scope and make no pretense at being an introduction to the whole field of philosophy. They are in all cases topics in which contemporary debate is lively and as yet unsettled and to which contributions are being made by more than one field of learning.

10. Mind and Body. Spring 1988. Ms. Coleman.

An examination of the contemporary controversy about the nature of the mind. Materialistic, behavioristic, and other "reductionistic" claims that intelligence can be understood in terms of neural physiology and "intelligent" machines (computer and similar automatons) are contrasted with claims that consciousness plays an indispensable role in human intelligence and cannot be exhaustively understood in terms of the machine image. Scientific and philosophical arguments on both sides of the question are examined, and the relevance of the controversy to the current cultural crisis is brought out.

11. Free Will. Fall 1988. Mr. Corish.

An examination of the question whether or not we have what has traditionally been called free will. Are our actions free, or at least partly free; or are they wholly caused, or determined, in some sense that makes the notion of freedom inappropriate in descriptions of actions? Today

the question is often dealt with in terms of the related concept of moral responsibility. Are we really responsible agents as our tradition tells us we are? This question then leads to a number of others. What do we mean when we say that people are responsible for their actions? Are the concepts of moral and legal responsibility of permanent human importance, or should they be replaced by concepts that are more suited to certain contemporary deterministic views of human nature? What role does reasoning play in human action? Can reasoning be understood in deterministic terms? Readings in contemporary and older materials are used as the basis for the seminar discussions.

[12. **What Is Humanism?**]

14. **Types of Philosophic Prose.** Spring 1987. Mr. McGee.
Some traditional and contemporary problems of philosophy are presented in classic forms of philosophic prose. Thus, dialogue is represented by Plato and Berkeley; demonstration by Descartes and Spinoza; the essay by Hume, Schopenhauer, and Mill; lyric prose by Nietzsche; and professional prose by Bertrand Russell and A. J. Ayer. Student-written work will be required in all these types.

15. **Self and Self-Knowledge.** Fall 1986 and 1988. Mr. Corish.
What is the self? What knowledge do we have of the self? Is that knowledge similar to or different from our knowledge of the world about us—that is, is knowledge of the subject similar to or different from knowledge of an object? These and other questions (e.g., personal identity, the unconscious, emotion) discussed. Readings range from ancient (Plato, Aristotle, Augustine) to modern (Hume, Kant, perhaps Freud, Jung, the Behaviorists).

Introductory Courses

51. **Philosophy and Poetry.** Spring 1989. Mr. Corish.
A study of some recognized philosophical doctrines as they appear in poetry, e.g., the philosophical doctrines of Aquinas in the poetry of Dante, those of Duns Scotus in the poetry of Hopkins, the doctrine of metempsychosis in Wordsworth's *Intimations of Immortality*, Kantian doctrines in Coleridge, etc. Doctrines and poets considered may vary from year to year. We shall also discuss poetic techniques and expressions in philosophy, as, for example, in Parmenides and in Plato, and shall devote some considerable time to a philosophical discussion of the nature of poetry.

53. **Literature as Philosophy.** Spring 1988. Mr. McGee.
After a presentation of the explicitly philosophical background of the

literary works to be studied, the philosophic life-attitudes expressed in them are examined to determine their adequacy as philosophy and their relevance to conduct. The literature varies from time to time but always includes one major contemporary work and one major older work.

54. **Introduction to Logic and Language.** Fall 1988. Mr. McGee.

An introduction to the liberal art of critical thinking. Examines the use of language, definition, induction, deduction, argument from analogy, and informal fallacies. Stresses the application of the principles of logic to the evaluation of contemporary social and political issues.

58. **Environmental Ethics.** Fall 1986. Ms. Coleman.

This course is a study of the ethical assumptions that underlie various views concerning our dealings with the environment. Topics discussed in this course include strong vs. weak anthropocentrism, deep vs. shallow ecology, deontology vs. utilitarianism, holism vs. individualism, rights of animals, rights of future generations, and land ethics. Limited to twenty students. Priority given to students participating in the Environmental Studies Program.

111. **Major Philosophers of the West: Beginnings to Christianity.** Fall 1986. Mr. Corish. Fall 1987. Mr. McGee. Fall 1988. Ms. Coleman.

The sources and prototypes of Western thought. Concentration on Plato and Aristotle, but some attention is given to the pre-Socratic philosophers who influenced them and to the Stoics and Epicureans. Medieval philosophy is more briefly considered, to show the interaction of Christianity and Greek thought.

112. **Major Philosophers of the West: Renaissance to Idealism:** Spring 1987 and 1988. Ms. Coleman. Spring 1989. Mr. Corish.

Some attention is given to the philosophic grounds of the scientific revolution and to the intellectual and moral response the new scientific view of the world evoked from the philosophers. Reading in five or six of the following: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

Prerequisite: **Philosophy 111.**

Intermediate Courses

200. **Major Philosophers of the West: The Nineteenth Century.** Fall 1986 and 1988. Ms. Coleman.

A study of tendencies in the nineteenth century that have had an important influence on contemporary thought: the situation of philosophy after Kant; the development of idealism through Fichte, Schelling, and Hegel; the decline and fall of reason from Hegel to Schopenhauer and

Kierkegaard; dialectical materialism, utilitarianism, and the origins of positivism.

Prerequisite: **Philosophy 111** and **112.**

221. Ethics. Spring 1987 and 1989. Mr. McGee.

Various types of answers to the questions, What is right for me to do? What ought to be done? and What is the good for man? are traced to their philosophic bases in historical and contemporary sources. The justification these bases provide is critically discussed, and some possible meanings of statements used to answer questions in morals are made explicit and compared.

Prerequisite: **Philosophy 111** and **112,** or consent of the instructor.

223. Logic and Formal Systems. Spring 1988 and 1990. Mr. Corish.

An introduction to the techniques and applications of twentieth-century deductive logic. After a consideration of the traditional approach, including the syllogism, the following topics are taken up: propositions, truth-functions, quantification theory, predicates, relations, natural deduction, and the properties of formal systems (consistency, completeness, etc.). No background in mathematics is presupposed.

225. The Nature of Scientific Thought. Fall 1987 and 1989. Mr. Corish.

A historical and methodological study of scientific thought as exemplified in the natural sciences. Against a historical background ranging from the beginnings of early modern science to the twentieth century, such topics as scientific inquiry, hypothesis, confirmation, scientific laws, theory, and theoretical reduction will be studied. The readings include such authors as Burtt, Butterfield, Duhem, Hempel, Koyré, Kuhn, Nagel, Poincaré, Popper, Toulmin, as well as classical authors such as Galileo, Descartes, Newton, Berkeley, and Leibniz.

Prerequisite: **Philosophy 111** and **112,** or consent of the instructor.

226. On Love. Fall 1986. Mr. McGee.

An examination of philosophic attempts to analyze and clarify the cluster of concepts signaled by terms such as "love," "friendship," "charity," "*agapē*," and "fellow-feeling." Readings drawn from some of the following authors: Plato, Aristotle, St. Paul, St. Thomas, Spinoza, Schopenhauer, Nietzsche, Freud, Ortega y Gasset, and C. S. Lewis.

Prerequisite: **Philosophy 111** and **112,** or consent of the instructor.

[228. Contemporary Philosophy of Human Nature.]

229. Philosophy of Art. Fall 1987 and 1989. Ms. Coleman.

A comparative study of the nature of meaning in poetry, music, and the visual arts. Focuses on selected major works in these three fields

and, in this concrete setting, the relations between meaning and the expressive and productive (or creative) aspects of art are explored.

Prerequisite: **Philosophy 111** and **112,** or consent of the instructor.

Advanced Courses

Although courses numbered in the 300s are advanced seminars primarily intended for majors in philosophy, adequately prepared students from other fields are also welcome. Besides the stated prerequisite, **Philosophy 111** and **112,** at least one of the courses from the group numbered in the 200s will also be found a helpful preparation.

331. Plato and Platonism. Spring 1987. Mr. Corish.

A study of some of the principal dialogues of Plato, drawn chiefly from his middle and later periods, followed by a study of selected material from the later history of Platonism. The instructor will select the dialogues that will be read, but topics to be studied in later Platonism and Neoplatonism will depend on the particular interests of the students.

Prerequisite: **Philosophy 111** and **112.**

332. The Analytic Movement. Spring 1988. Mr. McGee.

Selected topics in twentieth-century philosophical analysis, including G. E. Moore's ethics, Russell's logical atomism, the related doctrine of Wittgenstein's *Tractatus,* the logical positivism of the Vienna Circle, the ordinary language movement as represented by Moore and by Wittgenstein in the *Philosophical Investigations,* and the views on the analytic-synthetic distinction and on ontology propounded by Quine on the basis of formal logic.

Prerequisite: **Philosophy 111** and **112.**

[**333. Wittgenstein.**]

334. Topics in Medieval Philosophy. Fall 1988. Mr. Corish.

An examination of some fundamental medieval views concerning man and his environment. Special attention paid to the Aristotelian world view as made over to Christian specifications, and to its decline in favor of the modern scientific view of man and the world.

Prerequisite: **Philosophy 111** and **112.**

335. The Philosophy of Aristotle. Fall 1987. Mr. Corish.

A textual study of the basics of Aristotle's philosophy. Aristotle's relationship to Plato, his criticism of the Platonic doctrine of Forms, and Aristotle's own doctrines of substance, causation, actuality, potentiality, form, and matter are discussed. Some of the Aristotelian disciplines of logic, physics, metaphysics, psychology, and political and moral phi-

losophy are examined in terms of detailed specific doctrines, such as that of kinds of being, the highest being, the soul, virtue, the state. Ends with a discussion of Aristotle's views of systematic research and his influence on subsequent thought.

Prerequisite: **Philosophy 111** and **112.**

336. **Spinoza's Ethics.** Fall 1986. Mr. McGee.

A detailed study of the text of Spinoza's major work, *The Ethics.*

Prerequisite: **Philosophy 111** and **112.**

[337. Kant.]

338. **Hume and Kant.** Spring 1987 and 1989. Ms. Coleman.

A critical and comparative study of Hume's *Treatise of Human Nature,* Book I, and Kant's *Critique of Pure Reason.* The study of these texts focuses on such issues as the problem of scepticism, philosophical methodology, the epistemological role of imagination, and the dialectic of human reason.

Prerequisite: **Philosophy 111** and **112.**

339. **Schopenhauer.** Fall 1987 and 1989. Mr. McGee.

A detailed study of the text of Schopenhauer's major work, *The World as Will and Idea.*

Prerequisite: **Philosophy 111** and **112.**

290. **Intermediate Independent Study.** The Department.

400. **Advanced Independent Study and Honors.** The Department.

Physics and Astronomy

Professor LaCasce, *Chairman;* Professor Hughes; Visiting Professor VanSciver; Associate Professor Turner; Assistant Professor Syphers; Teaching Associate Roberts

Requirements for the Major in Physics: The major program in physics depends to some extent on the student's goals. These goals should be discussed with the department. Those who intend to do graduate work in physics should plan to do an honors project. For those considering a program in engineering, consult page 88. A major student with an interest in an interdisciplinary area such as geophysics, biophysics, or oceanography will choose appropriate courses in related departments. Secondary school teaching requires a broad base in science courses as well as the necessary courses for teacher certification. For a career in industrial management, some courses in economics and government should be included.

In any case a major in physics is expected to complete **Mathematics 161, 171,**

Physics 103, 223, 227, 228, and four more approved courses, one of which may be **Mathematics 181** or above, or **Chemistry 251.** In addition a major is expected to have a working knowledge of a computer language. This requirement can be satisfied by **Computer Science 100** or **Mathematics 244** or by demonstrated competence. For honors work a student is expected to complete **Mathematics 181** or **223** and **Physics 103, 223, 227, 228, 300, 310, 400,** and four more courses, one of which may be in mathematics above 181 or **Chemistry 251.** Students interested in interdisciplinary work may, with permission, substitute from other departments.

Requirements for the Minor in Physics: At least four courses numbered 103 or higher, at least one of which is from the set of **Physics 223, 227,** and **228.**

Interdisciplinary Majors: The department participates in interdisciplinary programs in chemical physics and geology and physics. See page 165.

Core Courses

103. Mechanics and Matter. Every semester. Fall 1986. Mr. Roberts. Spring 1987. Mr. Turner.

The basic concepts and laws of classical mechanics with special emphasis on the conservation laws of momentum, energy, and angular momentum. Particle dynamics, including the motions of particles in gravitational, electric, and magnetic fields. A brief introduction to kinetic theory and special relativity. Three hours of laboratory work a week.

Prerequisite: Previous credit or concurrent registration in **Mathematics 161.** Enrollment is limited to students without credit for or concurrent registration in **Chemistry 251.** Open only to freshmen and sophomores in the fall.

223. Electric Fields and Circuits. Every spring. Mr. Syphers.

The basic phenomena of the electromagnetic interaction are introduced. The basic relations are then specialized for a more detailed study of linear network theory. Laboratory work stresses the fundamentals of electronic instrumentation and measurement. Three hours of laboratory work a week.

Prerequisite: **Physics 103** and previous credit or concurrent registration in **Mathematics 171,** or consent of the instructor.

227. Waves and Quanta. Every fall. Mr. LaCasce.

Wave motion occurs in many areas of physics. A discussion of basic wave behavior and the principle of superposition leads to a study of wave propagation and its relationship to coherence, interference, and diffraction. The wave model of the atom provides an introduction to

atomic spectra. The laboratory work provides experience with optical methods and instruments.

Prerequisite: **Physics 103** and previous credit or concurrent registration in **Mathematics 171,** or consent of the instructor.

228. **Modern Physics.** Every spring. Mr. VanSciver.

An introduction to the basic concepts and laws of nuclear and particle physics, covering the principles of relativity and quantum theory, particle accelerators, nuclear structure and reactions, and the behavior of elementary particles. The physics of radioactivity and the biological, medical, and ecological applications of radiation are given special emphasis through weekly laboratory exercises with radioactive materials and nuclear instrumentation. Three hours of laboratory work a week.

Prerequisite: **Physics 103** and previous credit or concurrent registration in **Mathematics 171,** or consent of the instructor.

229. **Statistical Physics.** Fall 1987. Mr. Syphers.

Develops a framework capable of predicting the properties of systems with many particles. This framework, combined with simple atomic and molecular models, leads to an understanding of such concepts as entropy, absolute temperature, and the canonical distribution. Some probability theory will be developed as a mathematical tool.

Prerequisite: **Physics 103** and previous credit or concurrent registration in **Mathematics 171,** or consent of the instructor.

300. **Methods of Theoretical Physics.** Every spring. Mr. LaCasce.

Mathematics is the language of physics. Similar mathematical techniques occur in different areas of physics. A physical situation may first be expressed in mathematical terms, usually in the form of a differential or integral equation. After the formal mathematical solution is obtained, the physical conditions determine the physically viable result. Examples are drawn from heat flow, gravitational fields, and electrostatic fields.

Prerequisite: **Mathematics 181** or **223,** and **Physics 223, 227,** or **228.**

310. **Atomic Physics.** Every fall. Mr. Syphers.

An introduction to quantum theory, solutions of Schroedinger equations, and their applications to atomic systems.

Prerequisite: **Physics 227** and **300.**

320. **Electromagnetic Theory.** Every other spring. Spring 1988. Mr. Turner.

First the Maxwell relations are presented as a natural extension of basic experimental laws, then emphasis is given to the radiation and transmission of electromagnetic waves.

Prerequisite: **Physics 223** and **300,** or consent of the instructor.

350. Solid State Physics. Every other spring. Spring 1987. Mr. Turner.
The physics of solids, including crystal structure, lattice vibrations, and energy band theory.
Prerequisite: **Physics 310.**

370. Advanced Mechanics. Every other fall. Fall 1987. Mr. Turner.
A thorough review of particle dynamics, followed by the development of Lagrange's and Hamilton's equations and their applications to rigid body motion and the oscillations of coupled systems.
Prerequisite: **Physics 300** or consent of the instructor.

400. Advanced Independent Study and Honors. The Department.
Programs of study for general relativity, the physics of thin films, biophysics, magnetic resonance, and low-temperature physics are available. Work done in these topics normally serves as the basis for an honors paper.
Prerequisite: **Physics 300.**

Adjunct Courses

62. Contemporary Astronomy. Every spring. Mr. Hughes.
A generally qualitative discussion of the nature of stars and galaxies, stellar evolution, the origin of the solar system and its properties, and the principal cosmological theories. Enrollment in this course is limited to fifty students without credit or concurrent registration in **Physics 103.**

63. Physics of the Twentieth Century. Every fall. Mr. Hughes.
Although the physics of the eighteenth and nineteenth centuries enjoyed many great successes, there was by the end of the nineteenth century a growing awareness of the limitations of what we now call classical physics. This course traces the discovery of those limitations and the rise of modern physics. Topics discussed include the development of quantum mechanics and relativity, the origin and growth of nuclear and elementary particle physics, the rise of electronics, and those aspects of technology which have had a special relationship with physics.
Prerequisite: Ordinary secondary school mathematics. Enrollment is limited to fifty students without credit for or concurrent registration in **Physics 103.**

[**225. Physical Oceanography.**]

240. Digital Electronics. Every other fall. Fall 1986. Mr. Turner.
An introduction to the basic principles of binary circuits and digital electronics. Topics include Boolean algebra and logic circuitry, binary

numbers and computation, memory circuits and information storage, digital/analog conversion, and circuits for timing and control. The structure of digital instruments, calculators, and computers is covered as time permits. Laboratory work with digital integrated circuits.

Prerequisite: **Physics 103.**

250. **Problems in Acoustics.** Spring 1987. Mr. LaCasce.

An introduction to wave motion and wave propagation; the techniques and problems of physical acoustical measurements and their relation to the ear and hearing. Selected topics include noise and the control of noise, architectural acoustics, and normal modes.

Prerequisite: **Physics 103** and **Mathematics 161.**

260. **Biophysics.** Every spring. Mr. Hughes.

An introduction including discussion of the effects of ionizing radiation on cells and tissues, the application of X-ray diffraction methods to biological problems, and other modern topics. Some attention is given to historical aspects of the subject and to the development of devices such as the electron microscope.

Prerequisite: **Physics 103, Chemistry 101, 102,** and **Mathematics 171.**

262. **Astrophysics.** Every fall. Mr. Hughes.

A quantitative discussion which introduces the principal topics of central importance in astrophysics, including stellar structure and evolution, planetary physics, and cosmology.

Prerequisite: **Physics 103.**

290. **Independent Study.** The Department.

Topics to be arranged by the student and the staff. If the investigations concern the teaching of physics, this course may satisfy certain of the requirements for the Maine State Teacher's Certificate.

Prerequisite: Normally, a previous course at the 200 level.

Psychobiology

Administered by the Committee on Psychobiology

Professor Rose, *Chairman*

Requirements:

1. **Biology 101, 102,** and **203.**
   Chemistry 102 and **225.**
   Psychology 101 and **261; 262** or **270.**
   Psychology 250 or **Math 70.**
   It is recommended that **Biology 203** be taken before **Psychology 261.**

2. Three courses chosen from:
   Biology 113, 114, 116, 151, 204, and **261.**
   Psychology 210, 220, 260, 262, 270, 280, 360, and **361.**
   At least one course chosen from each of the two departments.

3. **Physics 103** is recommended.

Psychology

Associate Professor Schaffner, *Chairman;* Professor Fuchs; Associate Professors Held, Rose, and Small; Assistant Professor Johnson; Visiting Lecturer Stover

Requirements for the Major in Psychology: The major consists of nine courses numbered 100 or above, selected by students with their advisors and subject to departmental review. Each major program includes **Psychology 101, Psychology 250,** and an advanced course (300 or above). In addition, each major includes a laboratory sequence of two courses numbered 260-279, taken after statistics. At least one of these must be a 260-level course. The laboratory sequence should be completed prior to the senior year. During the senior year majors are encouraged to engage in independent study on a library, laboratory, or field research project.

Students who are interested in teaching as a career should consult with the Department of Education for courses to be included in their undergraduate program. Ordinarily, students of education will find much of relevance in **Psychology 210, 270, 361;** these courses cover the topics usually included in educational psychology. In addition, prospective teachers may find **Psychology 211, 212, 220,** and **271** compatible with their interests and helpful in their preparation for teaching.

Interdisciplinary Major: The department participates in an interdisciplinary program in psychobiology. See pages 187-188.

Requirements for the Minor in Psychology: The minor consists of five courses numbered 100 or above, selected by students with their advisors and subject to departmental review. Each minor program includes **Psychology 101** and **250,** and one laboratory course numbered 260-279.

10. Psychological Curiosity: Modeling Social Processes. Every other year. Spring 1988. Mr. Schaffner.

Elementary concepts of model building and exploration. Topics and examples are drawn from many areas of psychology and the related social sciences. Daily written exercises provide the basis for class study of several central models in the social sciences. Computer modeling will be introduced, but no prior computing experience is presumed.

50. Mind and Brain: Historical and Contemporary Issues. Fall 1986. Mr. Rose.

What are the influences now and in the past that determine an accepted view of the biological basis of "human nature"? This course examines the interaction of historical, philosophical, sociopolitical, technological, and personal factors which preceded and led to modern views of our normal and abnormal behaviors. Contemporary issues include sociobiology, genetics and behavior, psychopharmacology, biological arguments in race and sex discrimination, and biology's role in social policy.

Introductory Courses

101. Introduction to Psychology. Every semester. The Department.

A general introduction to the major concerns of contemporary psychology including psychobiology, perception, learning, cognition, development, personality, states of consciousness, abnormal and social behavior. Recommended for freshmen and sophomores.

Intermediate Courses

210. Developmental Psychology. Every spring. Ms. Johnson.

A survey of the physical, personality, social, and cognitive changes that occur from conception to adulthood. Where appropriate, such theoretical traditions as American S-R, psychoanalytic, information processing, and the epistemological approaches of Piaget are contrasted. An optional practicum with preschool or elementary school children may be available.

Prerequisite: **Psychology 101.**

211. Personality. Every fall. Ms. Held.

A comparative survey of theoretical and empirical attempts to explain personality and its development. The relationships of psychoanalytic, interpersonal, phenomenological, and behavioral approaches to current research are considered.

Prerequisite: **Psychology 101.**

212. Social Psychology. Every spring. Mr. Schaffner.

A survey of theory and research on psychological aspects of social behavior. Topics include conformity, language and communication, attitudes, prejudice and racism, social epistemology, decision making, and group conflict. Class research projects supplement readings and lectures. Social psychological aspects of race relations in the United States are a focal topic.

Prerequisite: **Psychology 101** or **Sociology 101.**

220. Atypical Child. Every other year. Spring 1987. Mr. Stover.

A comparative understanding of theories and research concerning the etiology, development, diagnosis, and treatment of various forms of childhood exceptionality.

Prerequisite: **Psychology 211** or **210.**

[221. Individual Differences.]

222. Law and Psychology. Every other year. Spring 1989. Ms. Held.

Presents topic areas where there is an interface between psychological and legal issues. The first emphasis is on how psychology can study and aid the legal process. The second emphasis assesses the special concerns of the mental health professional within the legal system. Limited to thirty students. No freshmen admitted.

Prerequisite: **Psychology 101.**

223. Political Psychology. Every other year. Spring 1987. Mr. Schaffner.

An analysis of psychological aspects of political behavior, considering both prominent figures and the general public. Topics include the psychological foundations of politics; ideology and the structure of belief systems; activism and alienation; political socialization; power tactics; rationality of political choice; leadership; and psychobiography.

Prerequisite: **Psychology 211** or **212,** or **Sociology 250.**

250. Statistical Analysis. Every fall. Mr. Schaffner.

An introduction to the use of descriptive and inferential statistics in behavioral research. Weekly laboratory work in computerized data analysis. Required of majors no later than the junior year.

Prerequisite: **Psychology 101, Sociology 101,** or consent of the instructor.

260. Abnormal Personality. Spring 1987. Ms. Held.

A general survey of the nature, etiology, diagnosis, and treatment of common patterns of mental disorders. An optional, supervised practicum at a local psychiatric unit is available.

Prerequisite: **Psychology 211** and **250,** or consent of the instructor.

261. Psychobiology. Every fall. Mr. Rose.

An introductory survey of the biological correlates of behavior with special emphasis on the neurosciences. Topics include neurophysiology, psychopharmacology, perceptual systems, and sociobiology as well as brain mechanisms in sleep and wakefulness, normal and abnormal emotional behaviors, learning, memory, and higher functions. Ethical and political implications of neuroscience are also discussed. Discussions and demonstration labs provide students exposure to animal and human

neuroscience techniques which can lead to advanced individual projects in **Psychology 360.**

Prerequisite: **Psychology 101** or **Biology 111. Biology 203 (Comparative Neurobiology)** is recommended.

262. Perception. Every other year. Spring 1988. Mr. Rose.

A survey of the basic phenomena and problems of perception and sensory psychology. Topics include psychophysics; coding of sensory qualities such as color, pitch, touch, and pain; the influence of early experience, culture, attention, and altered states of consciousness. Laboratory work included.

Prerequisite: **Psychology 101** and **250,** or consent of the instructor.

270. Cognition. Every spring. Mrs. Small.

An analysis of research methodology and experimental investigations in cognition, which includes attention, memory, comprehension, thinking, and problem solving. Laboratory work, including experimental design.

Prerequisite: **Psychology 250.**

271. Language. Fall 1986. Ms. Johnson.

An analysis of how language is produced and understood. The topics to be covered include speech perception, speech production, comprehension, language development, and the relationship between language and other cognitive processes. The class will design and execute an original research project.

Prerequisite: **Psychology 250.**

272. Research in Social Behavior. Every other year. Fall 1986. Mr. Schaffner.

A laboratory course on research design and methodology in social and personality psychology, focusing on a topic of current theoretical importance. Students plan and carry out original research.

Prerequisite: **Psychology 211** or **212,** and **250.**

[**280. Infancy.**]

Advanced Courses

310. Clinical Psychology. Every other year. Fall 1987. Ms. Held.

The history and development of clinical psychology including an emphasis on current controversies regarding ethical and legal issues. Major portions of the course are devoted to theory and research concerning psychological assessment and types of psychotherapies.

Prerequisite: **Psychology 220** or **260.**

311. History and Systems of Psychology. Spring 1987. Ms. Johnson.

An examination of the history of major theoretical traditions in

psychology, including both the philosophical antecedents of psychology and the changes that have taken place since the establishment of psychology as a science.

Prerequisite: At least three intermediate or advanced courses in psychology (excluding **Psychology 250**), or consent of the instructor.

[312. **Topics in Psychology.**]

360. **Behavioral Neuroscience.** Every spring. Mr. Rose.

This is both a literature survey seminar and a research course. The seminar will focus on contemporary neuroanatomical, neurosurgical, neurophysiological, neurochemical, and psychopharmacological studies as applied to human behavior. In addition, hands-on competence will be gained in basic neuroscience research design and methodology leading to specific studies by teams working on multi-disciplinary problems.

Prerequisite: **Psychology 261** and **Biology 203**, or consent of the instructor.

361. **Cognitive Development.** Every fall. Mrs. Small.

The development of mental representation and cognitive processes from infancy to early adulthood. Emphasis on experimental research and related theories of cognitive development, especially on the development of perception, memory, learning, comprehension, thinking, and problem solving.

Prerequisite: **Psychology 250**, and **Psychology 210** or **270**.

[362. **Language Development.**]

290. **Intermediate Independent Study.** The Department.

400. **Advanced Independent Study and Honors.** The Department.

Religion

Professor Long, *Chairman;* Professor Geoghegan; Associate Professor Holt

The primary and central purpose of the religion major is to provide means for the study of the distinctive subject matter of religion in a liberal arts context. Methods employed in other liberal arts and sciences are also used in the study of religion. Although the department does not provide specific preprofessional training, the study of religion as one of the liberal arts and sciences does have a vocational bearing, particularly as preparation for graduate work. Each major is assigned a departmental adviser who assists the student in formulating a plan of study in religion and in related courses in other departments, such as languages for those planning graduate study. The adviser may

also provide counsel in vocational planning. Students who continue in the study of religion after college usually do so in an M.A. or Ph.D. program at a graduate school or in a B.D. or M.Div. program at a divinity school or theological seminary. Information about other options is available through departmental advisers.

Requirements for the Major in Religion: The major consists of at least eight courses in religion approved by the department. **Religion 101** must be taken not later than the sophomore year. One course from those numbered 10-99 may count toward the major but cannot be substituted for **Religion 101.** Each major must take at least one course from each of the following core areas: religions of South or East Asian origin, religions of Near Eastern origin, and religious thought.

Interdisciplinary Major: The department participates in an interdisciplinary program in art history and religion. See pages 164-165.

Independent Study: A student proposing to undertake an independent study project under the supervision of a faculty member of the department must submit, not later than April 1 or November 1 of the semester *before* he or she wishes to pursue the project, a plan for it on a form to be obtained from the department. The department faculty will review applications and only on the basis of its approval may the project be undertaken. This regulation also applies to honors proposals.

Honors in Religion: Students contemplating honors candidacy should possess a record of distinction in departmental courses, including those which support the project, a clearly articulated and well-focused research proposal, and a high measure of motivation and scholarly maturity. It is recommended that such students complete *two semesters* of independent study in preparing research papers for honors consideration.

Requirements for the Minor in Religion: A minor consists of five courses which may be assembled in one of the following patterns: (1) **Religion 101,** one intermediate level (200) course from each core area, and one seminar at the freshman or advanced (300) level; (2) **Religion 101** and any two pairs of related sequences at the intermediate level; (3) **Religion 101,** one pair of related semester sequences at the intermediate level, and two seminars, one at the freshman and one at the advanced levels.

Freshman Seminars

Religion 10 and **11** are introductory in nature, focusing on the study of a specific aspect of religion, and may draw on other fields of learning. They are not intended as prerequisites for more advanced courses in the department unless specifically designated as such. They include readings, discussions, and reports.

Topics change from time to time to reflect emerging or debated issues in the study of religion.

Enrollment is limited to twenty students for each seminar. Freshmen are given priority for available spaces.

Seminars may be repeated for credit with contents changed.

10. **Psychoanalysis and Religious Experience.** Fall 1986. Mr. Geoghegan.
Reading and discussion of basic works by Freud, Erikson, William James, and others.

11. **Story, Storytelling, and Religion.** Spring 1987. Mr. Long.
Stories of gods, people, and sacred things—their role as religious activity in human quests for identity. Examples drawn from Christian, Jewish, and Muslim sources, along with modern interpretations.

50. **The Bible in Literary Focus.** Fall 1986. Mr. Long.
A study of selected narratives and poems with emphasis upon the Bible's diverse imaginative worlds. Consideration given to the Bible as wellspring of images and motifs for western literary artists. (Same as **English 103.**)

51. **Existentialism.** Fall 1987. Mr. Geoghegan.
Comparative study of religious and secular existentialism from Kierkegaard to the present. Lectures, readings, and discussions of primary writings.

Religion 101-104 offer introductions to religion and specific religious traditions. They need not be taken sequentially.

101. **Introduction to the Study of Religion.** Fall 1986. Mr. Geoghegan. Spring 1987. Mr. Holt.
Basic concepts, methods, and issues in the study of religion, with special reference to examples comparing and contrasting Eastern and Western religions. Lectures, discussions, and readings in classic texts and modern interpretations.

†102. **Asian Religious Thought.** Fall 1986. Mr. Holt.
Introduction to the religious worldviews (cosmologies, basic doctrines, and soteriologies) of Taoism, Hinduism, Buddhism, and Confucianism.

103. **Christianity.** Spring 1987. Mr. Geoghegan.
The development of Christianity from its beginnings to the present with emphasis upon a variety of contemporary interpretations. Lectures, readings, and discussions.

104. **Judaism.** Spring 1988. Mr. Long.
Jewish experience in sacred story, ritual, and study. The life styles of Torah, philosophy, and mysticism. Historical developments, continuity

and change, modulation of traditional forms in practice and interpretation. Readings in basic sources and contemporary texts, discussions, lectures, and field study.

†200. **Hebraic Origins.** Fall 1986. Mr. Long.

A comparative study of the varieties of Judaism in late antiquity. Readings and discussions of various primary sources including the Bible, Talmud, Midrash, and Dead Sea scrolls, along with modern interpretations.

Prerequisite: **Religion 101** or consent of the instructor.

201. **Christian Origins.** Spring 1987. Mr. Long.

A comparative study of the varieties of Christianity in late antiquity. Readings and discussions of various primary sources including the New Testament and non-Biblical writings, along with modern interpretations.

Prerequisite: **Religion 101** or consent of the instructor.

†220. **Religious Traditions of Ancient India.** Fall 1986. Mr. Holt.

A diachronic and synchronic study of the major religious traditions of traditional China and Japan. Primary readings include the *Tao Te Ching,* the *Analects of Confucius,* and the *Lotus Sutra.* Topics include the diffuse character of religion in relation to the family, community, and state, the symbolism and mysticism of Taoist tradition, the soteriology and speculative idealism of Mahayana Buddhism, and the aesthetics of Zen.

Prerequisite: **Religion 101** or consent of the instructor.

221. **Religion in Medieval and Modern India.** Spring 1987. Mr. Holt.

A study of social, cultural, and philosophical developments in medieval and modern Indian religious traditions. Topics include the establishment and character of Islam in India, the emergence of devotional Hindu movements, Guru Nanak and the Sikh tradition, Hindu reforms in the nineteenth and twentieth centuries (Ramakrishna, Vivekanada, Tagore, and Gandhi), and anthropological analyses of Hinduism in contemporary rural settings.

Prerequisite: **Religion 101** or consent of the instructor.

†222. **Theravada Buddhism, Culture, and Society.** Fall 1987. Mr. Holt.

An analysis of Buddhism as a system of religious thought and practice and as a socio-cultural force in the history of South and Southeast Asia, especially Sri Lanka. Conceptual topics include dharma, samsara, karma, rebirth, and nirvana; other topics include myth, symbolism, and ritual of the early Buddhist community, the relationship between Buddhism and the state, Buddhism and ethnic identity, and Buddhism and Christianity and Hinduism in the modern era.

Prerequisite: **Religion 101** or consent of the instructor.

223. **Mahayana Buddhism in East Asia.** Spring 1988. Mr. Holt.
General study of monastic and popular expressions of Dharma in Chinese and Japanese Buddhist cultures.
Prerequisite: **Religion 101** or consent of instructor.

240. **Western Religious Thought I: Beginnings through Middle Ages.** Fall 1987. Mr. Geoghegan.
Emphasis upon Plato, Plotinus, Augustine, Aquinas, and Eckhart. Lectures, readings, and discussions.
Prerequisite: **Religion 101** or consent of the instructor.

241. **Western Religious Thought II: Modern and Contemporary.** Spring 1988. Mr. Geoghegan.
Emphasis upon Luther, Hume, Kant, Hegel, and Niebuhr. Lectures, readings, and discussions.
Prerequisite: **Religion 101** or consent of the instructor.

300. **Analytical Psychology and Religion.** Spring 1987. Mr. Geoghegan.
Readings and discussion of basic works by Jung, Tillich, and others.
Prerequisite: **Religion 101, Psychology 1,** or consent of the instructor.

301. **Comparative Mysticism.** Spring 1988. Mr. Geoghegan.
Lectures on a variety of approaches to the study of mysticism and discussion of basic texts from Eastern, Western, classical, and contemporary sources.
Prerequisite: **Religion 101** or consent of the instructor.

290. **Intermediate Independent Study.** The Department.

400. **Advanced Independent Study and Honors.** The Department.

Romance Languages

Associate Professor Nunn, *Chairman;* Professors Thompson and Turner; Associate Professor Brogyanyi; Assistant Professors Dupuy Sullivan and VanderWolk; Lecturer Pellegrini; Instructors Alvarez, Hunsinger, and Mukhopadhyay; Teaching Fellows Cacot, Suarez, and Valeix

The Department of Romance Languages offers courses in French, Spanish, and Italian language and literature. Native speakers are involved in most language courses. Literature courses are conducted in the respective language.

Courses in English Translation: Each year the department offers at least one course in English translation. These courses are listed under the respective language and are numbered 322. Such courses may be taken for major credit only if the student's primary focus is another language.

Study Abroad: A period of study in an appropriate country, usually in the junior year, is strongly encouraged for all students of language. Bowdoin College is affiliated with a broad range of programs abroad and interested students should seek the advice of a member of the department early in their sophomore year.

Independent Study: Students who are well on their way to fulfilling the major requirements may apply to a member of the department for independent study. Such requests should be for a program of directed readings in the area of a teacher's expertise and should be made as early as possible.

Honors in Romance Languages: Majors may elect to write an honors project in the department. This involves two semesters of independent study in the senior year and the writing of an honors essay and its defense before a committee of members of the department. Candidates for department honors should also have a strong record in other courses in the department.

Requirements for the Major in Romance Languages: The major consists of eight courses more advanced than **French, Spanish,** or **Italian 204.** In French and Spanish these will normally be **205, 209, 311, 312,** and four other courses. The major may consist entirely of courses in either French or Spanish, or it may involve a combination of courses in French, Spanish, and Italian. It is expected that majors who are not writing an honors project will enroll in a topics course in their senior year. No more than two courses may be in independent study and no fewer than four Bowdoin courses should be taken. Prospective majors are expected to have completed **French** or **Spanish 205** and **209** before the end of their sophomore year.

Requirements for the Minor in Romance Languages: The minor consists of three Bowdoin courses in French above 204, or three courses in Spanish above 204.

French

101, 102. Elementary French. Every year. Mr. VanderWolk.

Study of the basic forms, structures, and vocabulary. Emphasis on listening comprehension and spoken French. During the second semester, some stress is placed on reading. There are regular language laboratory assignments. Enrollment limited to twenty-five in **101.**

[119. Seminars for Freshmen and Sophomores.]

203. Intermediate French I. Every fall. Ms. Dupuy Sullivan.

A one-semester review of basic French grammar. Written and oral exercises. Three class hours per week plus regular language laboratory assignments.

Placement on the basis of a test set by the department at the start of the fall semester.

204. **Intermediate French II.** Every semester. Fall 1986. Mr. Nunn. Spring 1987. Mr. VanderWolk.

Reading for acquisition of idioms and vocabulary, frequent short written exercises, practice in speaking. Three class hours per week, plus regular language laboratory assignments and sessions with the French teaching fellows.

Prerequisite: **French 203.**

205. **Advanced French.** Every semester. Fall 1986. Mr. Nunn and Ms. Dupuy Sullivan. Spring 1987. Ms. Dupuy Sullivan.

Aims to increase fluency in spoken and written French. Grammar review, one hour a week plus language laboratory. Reading and discussion of short fiction of France, Canada, and Africa, two hours a week. Conversation with French teaching fellows, one hour a week. Frequent written and oral assignments.

206. **Advanced French II.** Every spring. Mr. Nunn.

Continuation of **French 205.** Reading and discussion of articles and books dealing with contemporary France, two hours a week. Conversation with French teaching fellows, one hour a week. Regular written and oral assignments plus language laboratory.

209. **Introduction to French Literature.** Every semester. Fall 1986. Mr. Nunn. Spring 1987. Mr. VanderWolk.

An approach to the appreciation and analysis of French literature through close reading in class, short papers, and discussions of selected poems and short prose works from various periods of French literature. The major writers selected include Molière, Corneille or Racine, Ronsard, La Fontaine, Hugo, Maupassant, Gide, etc. The aim is to introduce the student to a critical approach to literature in general and to French literature in particular. Though this is not a survey course, it provides illustrations of chronological succession in literature. Papers and lectures in French.

Prerequisite: **French 205** or appropriate score on the placement test administered by the department at the start of the fall semester.

311. **Survey of French Literature I.** Every fall. Mr. Brogyanyi.

A broad introduction to French literature from the medieval period through the Renaissance. Individual works studied in the context of major literary and historical developments. Principal authors and works include *La Vie de Saint Alexis, La Chanson de Roland,* Marie de France, Chrétien de Troyes, *Le Roman de la Rose,* Rabelais, DuBellay, and Ronsard.

Prerequisite: **French 209** or consent of the instructor.

312. **Survey of French Literature II.** Every spring. Mr. Nunn.

A continuation of **French 311,** emphasizing texts of the seventeenth and eighteenth centuries which have had a major influence on French thought. Principal authors: Montaigne (*Essais*), Descartes (*Discours de la méthode*), Pascal (*Pensées*), Molière (*Tartuffe*), La Fontaine (*Fables*), La Bruyère (*Caractères*), La Rochefoucauld (*Maximes*), La Fayette (*La Princesse de Clèves*), Voltaire (*Lettres philosophiques*), Diderot (*Supplément au voyage de Bougainville*), D'Alembert (*Discours préliminaire*), Rousseau (*Rêveries d'un promeneur solitaire*).

Prerequisite: **French 209** or consent of the instructor.

[313. **French Poetry I.**]

314. **French Poetry II.** Every third year. Spring 1988.

A study of the evolution of modern French poetry from Baudelaire to the present. Close attention paid to representative literary trends and to the theory and practice of poets such as Mallarmé, Verlaine, Rimbaud, Valéry, Breton, Apollinaire, Char, and others.

Prerequisite: **French 209** or consent of the instructor.

315. **French Drama I.** Every third year. Fall 1986. Mr. Brogyanyi.

French drama of the seventeenth and eighteenth centuries. A survey of classicism and the major new currents of the eighteenth century. Plays by Corneille, Molière, Racine, Marivaux, Sedaine, and Beaumarchais. Close interpretive reading of texts and viewing of taped performances.

316. **French Drama II.** Every third year. Spring 1987. Ms. Dupuy Sullivan.

Critical study of dramatic theory and practice of the modern period. The principal authors studied are Artaud, Arrabal, Beckett, Genêt, Ionesco, and Sartre. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

317. **The French Novel I.** Every third year. Fall 1988. Mr. VanderWolk.

The development of the genre during the nineteenth century, with emphasis on the works of Balzac, Stendhal, Flaubert, and Zola. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

318. **The French Novel II.** Every third year. Spring 1989. Ms. Dupuy Sullivan.

A continuation of **French 317,** from realism to the *nouveau roman.* The principal authors studied are Gide, Proust, Malraux, Sartre, Camus, and Butor. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

320. Topics in French Literature and Culture I.

Designed to offer students who have a general knowledge of French literature and civilization the opportunity to study in greater depth individual authors, particular themes, or aspects of French civilization. Conducted in French. *The course may be repeated for credit with the contents changed.*

This course is intended primarily for seniors.

Fall 1986. **The French Cinema.** Mr. VanderWolk.

An introduction to film criticism and the detailed study of several French films. Analysis will center on a major theme, such as the French political consciousness. Conducted in French.

321. Topics in French Literature and Culture II.

Spring 1987. **Autobiography in France.** Mr. VanderWolk.

This course will examine the autobiographical tradition in France from the seventeenth century to the present through works by Descartes, Rousseau, Flaubert, Gide, and others, as well as autobiography's inextricable link to fiction. The recent trend toward auto-fiction will be studied through works by Sarraute, Robbe-Grillet, and Duras.

322. French Literature in Translation.

Spring 1987. **The French Enlightenment.** Mr. Brogyanyi.

Reading and discussion of key texts including *Persian Letters* (Montesquieu), *Candide* (Voltaire), *First Discourse* (Rousseau), and *Jacques the Fatalist* (Diderot). Emphasis will be placed on the broad cultural context of the Western Enlightenment, including its influence on North America. Supplementary tapes and slides provide a glimpse of the art and music of the period.

290. Intermediate Independent Study. The Department.

400. Independent Study. The Department.

Italian

101, 102. Elementary Italian. Every year. Ms. Pellegrini.

Three class hours a week and one weekly drill session with assistant. An introduction to Italian grammar and elementary reading, writing, and speaking skills. Some required laboratory work. Enrollment limited to twenty-five in 101.

203, 204. Intermediate Italian. Every year. Ms. Pellegrini.

Development of oral and written expression in Italian, accompanied

by a review of fundamentals. Three class hours a week. In both courses, modern Italian short stories and current news items serve as a basis for conversation and written assignments, as well as grammar study.

209. Selected Readings in Italian Literature. Spring 1988. Mr. Brogyanyi.

Readings from all periods and genres of Italian literature. Readings and oral and written reports in Italian. Lectures and discussion primarily in Italian.

Prerequisite: **Italian 204** or permission of the instructor.

[322. Italian Literature in Translation.]

290. Intermediate Independent Study. The Department.

400. Advanced Independent Study and Honors. Mr. Brogyanyi.

Spanish

101, 102. Elementary Spanish. Every year. Fall 1986. Ms. Mukhopadhyay. Spring 1987. Ms. Hunsinger.

Three class hours per week plus drill sessions and laboratory assignments. An introduction to the grammar of Spanish, aiming at comprehension, reading, writing, and simple conversation. Emphasis in the first semester is on grammar structure, with frequent oral drills. In the second semester more attention will be paid to reading and writing. Enrollment limited to twenty-five in **101.**

[130. Freshman Seminar.]

203, 204. Intermediate Spanish. Every year. Fall 1986. Mr. Alvarez. Spring 1987. Ms. Mukhopadhyay.

Three class hours a week and a conversation session with the teaching assistant. Grammar fundamentals are reviewed and class conversation and written assignments will be based on readings in modern literature.

Prerequisite: **Spanish 102** or appropriate score on a placement test set by the department at the start of the fall semester.

205. Advanced Spoken and Written Spanish. Every fall. Mr. Thompson.

Intended to develop fluency and to increase the range of expression in both speech and writing through the intensive study of selected grammatical topics and word differentiation.

Prerequisite: **Spanish 204** or appropriate score on a placement test set by the department at the start of the fall semester.

209. Introduction to the Study and Criticism of Hispanic Literature. Every spring. Mr. Alvarez.

Intended to develop an appreciation of the major genres of literature

in Spanish and to foster the ability to discuss them orally and in writing. Personal responses as well as the use of critical methods encouraged in discussions with the teacher and the teaching assistant. The principal authors studied are Calderon de la Barca, Zorrilla, Bécquet, Martí, Lorca, Neruda, Borges, García Márquez.

†311. **Readings in Modern Spanish American Literature.** Every fall. Mr. Alvarez.

A survey of the Spanish American literary tradition from modernism to the present. The principal authors studied are Martí, Dario, Vallejo, Quiroga, Neruda, Borges, Cortázar, Paz, Parra, García Márquez, Vargas Llosa, and Cardenal.

Prerequisite: **Spanish 209** or permission of the instructor.

312. **Readings in Modern Spanish Literature.** Every spring. Ms. Mukhopadhyay.

A survey of the major currents and writers of Spanish literature from the eighteenth century to the modern period.

Prerequisite: **Spanish 209** or permission of the instructor.

313. **Topics in Spanish and Hispanic-American Literature I.**

Designed to provide students who have a general knowledge of Spanish literature the opportunity to study in depth selected authors, genres, and literary movements. Conducted in Spanish. **Spanish 313** *and* **314** *may be repeated for credit with the contents changed.*

Prerequisite: **Spanish 311, 312,** or consent of the instructor.

Fall 1986. **Spanish Literature of the Golden Age.** Mr. Thompson.

†314. **Topics in Spanish and Hispanic-American Literature II.**

Spring 1987. **The Spanish American Literary Boom of the 1960s and 1970s.** Mr. Alvarez.

A survey of the major works of prose and poetry published during the 1960s and 1970s. Authors studied include Borges, Neruda, Carpentier, Cortázar, Cabrera Infante, García Márquez, Vargas Llosa, Parra, and Cardenal.

322. **Spanish Literature in Translation.**

Twentieth-Century Latin American Literature.
Every other spring. Spring 1987. Ms. Hunsinger.

Study of major works of prose and poetry in recent Latin American literature. Authors studied include Borges, Cortázar, García Márquez, Neruda, and Isabel Allende.

It is not open to students who have taken **Spanish 311** with the same topic.

290. Intermediate Independent Study. The Department.

400. Advanced Independent Study and Honors. The Department.

Russian

Assistant Professor Miller, *Acting Chairman* (Fall 1986); Associate Professor Knox, *Chairman* (Spring 1987); Visiting Lecturer Briker; Teaching Fellow Shulsky

Requirements for the Major in Russian Language and Literature: The Russian major consists of ten courses (eleven for honors) including **Russian 101, 102, 203, 204;** four courses in Russian above **Russian 204;** one approved course in either Russian literature in translation or Slavic civilization, or an approved related course in government, history, or economics; and one semester of independent study (for honors, two semesters). A student may work solely within the Department of Russian or jointly with both a member of the department and a faculty member from outside the department who is an expert in some area of Soviet/Russian studies. Students will be encouraged to spend one semester of the junior year at either the Pushkin Institute in Moscow or at Leningrad State University.

The Minor in Russian consists of seven courses (including the first two years of Russian), at least two of these may be taken outside the department with the permission of the department chairman. Courses outside the Department of Russian which may be counted for either the major or the minor are **Economics 214; Government 230, 235, 271,** and **341; History 217** and **218.**

Independent Language Study: In addition to courses in Russian, independent language study of Serbo-Croatian may be offered with the approval of the dean of the College.

101, 102. Elementary Russian. Every year. 1986-1987. Mr. Briker.

Emphasis on the acquisition of language skills through imitation and repetition of basic language patterns; the development of facility in speaking and understanding simple Russian. Conversation hour with native speaker.

203, 204. Intermediate Russian. Every year. 1986-1987. Mr. Miller.

A continuation of **Russian 101, 102.** Concentration on maintaining and improving the student's facility in speaking and understanding normal conversation Russian. Writing and reading skills also stressed. Conversation hour with native speaker.

Prerequisite: **Russian 101, 102.**

305, 306. Advanced Readings in Russian. Every year. 1986-1987. Mr. Miller.

Intended to develop the ability to read Russian at a sophisticated level

by combining selected language and literature readings, grammar review, and analysis of Russian word-formation. Discussion and written reports *in Russian*. Conversation hour with native speaker.

Prerequisite: **Russian 203, 204.**

309. **Special Topics in Russian Literature.** Every fall. Mr. Briker.

Intended to enable the student to utilize knowledge of Russian as a research tool in the investigation of Russian literature of the nineteenth century. Special attention paid to the genre of the short story and the *povest'* (short novel).

Prerequisite: **Russian 305, 306.**

310. **Special Topics in Modern Russian Literature.** Every spring. Ms. Knox.

Intended to enable the Russian student to read and discuss in Russian various works of modern Russian literature (Soviet and emigré). Special attention placed on the development of the short story and the *skaz* (folk tale). Discontinuity and commonalities between prerevolutionary and contemporary Soviet literature examined. Short term papers to be written in Russian.

Prerequisite: **Russian 309.**

290. **Intermediate Independent Study.** The Department.

400. **Advanced Independent Study and Honors.** The Department.

An original piece of research in which an attempt is made to elicit from the student a contribution to the field of Russian studies. Major primary and secondary sources should be read in Russian. *This course may be repeated for credit with the contents changed.* Upon demand this course is conducted as a small seminar on topics not covered in the above courses, such as *Soviet press, Russian poetry* or *scientific translations.*

Prerequisite: **Russian 310** or consent of instructor.

In English Translation

320. **Nineteenth-Century Russian Literature.** Every other fall. Fall 1987. Ms. Knox.

Works of the great Russian writers Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky, and Tolstoy are read. Concerned with the development of the Russian novel. Russian realism, its development and trends, discussed as a common denominator of nineteenth-century prose. Special focus given to the Westernizer-Slavophile dispute. Majors are required to do some of the reading in Russian.

321. **Twentieth-Century Russian Literature.** Every other spring. Spring 1988.

A two-part discussion of twentieth-century Russian prose before and

after the official proclamation of Socialist Realism. The first part is devoted to the innovative period of modernism and the avant-garde in the 1920s. The second half examines the return to didactic realism and the emergence of an underground movement of dissidence. Special attention given to the recurring Eastern or Scythian theme. Writers discussed are Andreyev, Bely, Zoshchenko, Bulgakov, Sinyavsky, Solzhenitsyn, Aksyonov, and others. Majors are required to do some of the reading in Russian.

322. **Topics Course.** Every other fall. The Department.
Works in specific areas of Russian literature not investigated in other departmental courses. A specific author, genre, literary movement, or social phenomenon may be emphasized. *This course may be repeated for credit with contents changed.* Majors are required to do some of the reading in Russian.

Fall 1986. **Russian Drama.**

†Fall 1988. **Women in Russian Society and Culture.**

323. **Dostoevsky and the Novel.** Every other spring. Spring 1987. Ms. Knox.
An examination of Dostoevsky's use of the novel to portray the "fantastic" reality of the city and its effects on narrative perspective. Special attention given to the author's quest for guiding principles of faith and love in a world of violence, cynicism, and neuroses. Emphasis on Dostoevsky's anti-Western and anti-science bias in his portrayal of the tragic struggle between extreme individualism ("self" will) and Christian brotherhood. Majors required to do some of the reading in Russian.

†325. **Slavic Civilization.** Every other spring. Spring 1987. Mr. Miller.
An introduction to Slavic Eastern Europe, its ethnic and linguistic background, its ancient history, its subsequent political and cultural movements, its relationship to the West and continuing problems of nationalism within Eastern Europe and the Soviet Union. A wide range of readings assigned from various fields.

Sociology and Anthropology

Associate Professor McEwen, *Chairman;* Professors Kertzer and Rossides; Associate Professor Bolles; Assistant Professors Bell, Floge, Kaplan, and Wilson; Visiting Assistant Professor Lutz

Requirements for the Major: In consultation with an adviser, each student plans a major program that will nurture an understanding of society and the human condition, demonstrate how social knowledge is acquired through research, and enrich his or her general education. On the practical level, a

major program prepares the student for graduate study in sociology and anthropology and contributes to preprofessional programs such as law and medicine. It also provides background preparation for careers in urban planning, the civil service, social work, business or personnel administration, social research, law enforcement and criminal justice, the health professions, journalism, secondary school teaching, and programs in developing countries.

A student may choose either of two major programs or two minor programs:

The Major in Sociology consists of eight courses, including **Sociology 201, 209,** and one course at the 300 level or above. A minimum of six courses in sociology may be supplemented by two advanced courses from anthropology or, as approved by the department chairman, by two courses from related fields to meet the student's special needs. **Sociology 201** should be taken in the sophomore year.

The Major in Anthropology consists of eight courses, including **Anthropology 101, 102, 201,** and **301,** and one course with an areal focus (numbered in the 130s and 230s). One or two of the eight courses may be taken from the advanced offerings in sociology or, as approved by the department chairman, from related fields to meet the student's special needs. Study abroad programs are encouraged as part of a student's study of other cultures; where such study away results in difficulties in meeting major requirements, alternative arrangements will be made.

The Minor in Sociology consists of five sociology courses, including **Sociology 201** and **209** and one course at the 300 level or above.

The Minor in Anthropology consists of five anthropology courses, including **Anthropology 101** and **301,** either **102** or **201,** and an area study course (130s and 230s).

For either major or minor program, one semester of independent study may be counted.

Departmental Honors: Students distinguishing themselves in either major program may apply for departmental honors. Awarding of the degree with honors will ordinarily be based on honor grades in major courses and a written project (emanating from independent study), and will recognize the ability to work creatively and independently and to synthesize diverse theoretical, methodological, and substantive materials.

Sociology

11. Freshman Seminar. The City: A Sociological Introduction. Fall 1986. Mr. Wilson.

An introduction to sociology through the study of selected urban problems using a variety of perspectives. Examines topics such as urbanization; the changing economic organization of modern cities; urban decline, redevelopment, and gentrification; city life styles; race and

ethnic stratification; and the urban class. Short papers and discussions emphasize analytical skills. This course is limited to sixteen students and will substitute for **Sociology 101** as a prerequisite for upper level departmental courses. Students taking this course may not also receive credit for **Sociology 101**.

101. Introduction to Sociology. Every semester. THE DEPARTMENT.

The major perspectives of sociology. Application of the scientific method to sociological theory and to current social issues. Theories ranging from social determinism to free will are considered, including the work of Marx, Weber, Durkheim, Merton, and others. Attention is given to such concepts as role, status, society, culture, institution, personality, social organization, the dynamics of change, the social roots of behavior and attitudes, social control, deviance, socialization, and the dialectical relationship between individual and society.

151. Sociology of Health and Illness. Every fall. Ms. BELL.

This course examines the social contexts of physical and mental health, illness, and medical care. Deals with such topics as the structure and processes of health care organizations; the social, environmental, and occupational factors in health and illness; development of health professions and the health work force; doctor-patient relationships; the illness experience; health care and social change (e.g., the women's health movement, holistic health care, socialized medicine).

Prerequisite: Sophomore standing.

201. Introduction to Social Research. Every spring. Ms. FLOGE.

Provides firsthand experience with the specific procedures through which social science knowledge is developed. Emphasizes the interaction between theory and research, and examines the ethics of social research and the uses and abuses of research in policy making. Reading and methodological analysis of a variety of case studies from the sociological and anthropological literature. Field and laboratory exercises that include observation, interviewing, use of available data (e.g., historical documents, statistical archives, computerized data banks, cultural artifacts), sampling, coding, use of computer, elementary data analysis and interpretation. Lectures, laboratory sessions, small-group conferences.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

203. The Family. Spring 1989. Ms. BELL.

The diversity of the family as a social institution in different times and places illuminates our understanding of the American family. An examination of contemporary research on the family life cycle, variation in

family composition, and trends in family living. The family is considered from several theoretical perspectives, leading to more comprehensive knowledge of this institution and the central role it plays in human life.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

206. **Urban Sociology.** Spring 1988. Ms. Floge.

An investigation into the diverse social patterns of urban life. Attention given to the expansion of urban populations in different cultural settings, contrasting the course of urbanization in the West and in traditional societies. The changing relation of urban centers to the rest of society is also analyzed, along with some of the problems generated by urbanization and contemporary approaches to resolving them. Students have an opportunity to study a particular aspect of urban society in depth.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

†208. **Race and Ethnicity.** Fall 1986. Mr. Wilson.

The social and cultural meaning of race and ethnicity with special emphasis on the politics of events and processes in contemporary America. Analysis of the causes and consequences of prejudice and discrimination. Examination of the relationships between race and class. Comparisons between the status of racial and ethnic minorities in the United States and their status in other selected societies.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

209. **Social Theory.** Every fall. Mr. Rossides.

A critical examination of some representative theories of the nature of human behavior and society. Social theory is related to developments in philosophy and natural science, and symbolic developments as a whole are related to social developments. The thought of some major figures in the ancient world (especially Plato, Aristotle, and the Stoics) and the medieval world (especially St. Thomas and Marsilio of Padua) is analyzed, but the main focus is on the figures who have struggled to explain the nature of capitalism, especially Hobbes, Locke, the *philosophes,* Comte, Spencer, Sumner, Ward, and with special attention, some of the great theoreticians of the "contemporary" world: Marx, Durkheim, Weber, Simmel, Pareto, Lenin, Cooley, Mao, Marcuse, Parsons. The course's main purpose is to provide the student with an opportunity to test familiar ideas and to acquire new ones about the nature of society, especially the structure and dynamics of industrial society.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

210. Sociology of Work and Organizations. Spring 1989. Ms. Bell.

Exploration of the structure, function, and meaning of work in modern industrial society, especially the United States. Examination of the rise and composition of the industrial labor force and the experiences of workers in different occupations and professions. Also analysis of the growth of complex organizations (bureaucracies) as well as their impact on and response to broader society from a variety of sociological perspectives. Consideration of alternatives (e.g., cooperatives, collectives). Students may study a particular occupation or profession in depth.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

213. Social Stratification. Spring 1987. Mr. Rossides.

A critical examination of representative theories of inequality which opens with a review of the basic questions and concepts in social stratification, and then develops case studies of three types of social inequality: caste (India, South Africa), estate (feudal Christendom, imperial China), and class (USSR). The heart of the course is an extended analysis of the American class system to determine sources of stability and conflict, and to identify legitimate and illegitimate forms of inequality. Considerable attention is given to theories of imperialism and to determining the United States' role in the international system of stratification. The final theme examines the theory which purports to see some form of postindustrial society emerging in the West.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

214. Science, Technology, and Society. Spring 1988. Ms. Bell.

Considers the social and intellectual origins of scientific knowledge and technological innovation and their impact on society from different theoretical perspectives. Identifies the social structure and dynamics of science as an institution and examines the relationship between the institution of science and the content of scientific knowledge. Explores the role of science and scientific knowledge in technological innovation. Examines the progress and problems associated with scientific and technological changes such as the space race in the 1950s and 1960s, nuclear power, and the production and distribution of pesticides and other hazardous substances.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

215. Criminology and Criminal Justice. Spring 1987. Mr. McEwen.

Focuses on crime and corrections in the United States with some cross-national comparisons. Examines the problematic character of the definition of "crime." Explores empirical research on the character, dis-

tribution, and correlates of criminal behavior and interprets this research in the light of social structural, cultural, and social psychological theories of crime causation. Discusses implications of nature and causes of crime for law enforcement and the administration of justice. Surveys the varied ways in which prisons and correctional programs are organized and assesses research about their effectiveness. Enrollment limited to thirty.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

[216. **The Sociology of Education.**]

217. **World Population.** Fall 1986. Ms. Floge.

Analysis of the components of population composition and dynamics. Both the causes and consequences of population changes will be examined. Attention given to such issues as birth control and women's liberation, zero population growth, population growth and economic development, world trends in life expectancy, labor force changes, the demographic transition, national and international migration, and changing age structure. Special consideration given to the relation between population dynamics and public policy decisions (e.g., day care, mandatory retirement). Population dynamics in Africa and Asia will be given special emphasis.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

218. **Sociology of Law.** Fall 1986. Mr. McEwen.

An analysis of the development and function of law and legal systems in preindustrial and industrial societies. Examination of the relationships between law and social change, law and social inequality, and law and social control. Special attention is paid to social influences on the operation of legal systems and the resultant gaps between legal ideals and the "law in action." Enrollment limited to thirty.

Prerequisite: Previous course in sociology or anthropology or government.

219. **Sociology of Sex Roles.** Fall 1986. Ms. Floge.

Various theoretical perspectives, including role theory, are used to study sex roles and their implications for society and individuals. The extent and possible causes (including biological, cultural, social, and economic) of sexual differences in behavior are examined. Topics include historical changes in sex roles as well as cultural and national differences.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

250. **Collective Behavior.** Spring 1987. Mr. Wilson.

An examination of the nature of collective behavior with primary emphasis on social movements. This course describes and analyzes social phenomena such as crowds, audiences, publics, riots, reform movements, conservative movements, and revolutions. Students may study a selected aspect of collective behavior in depth.

Prerequisite: Two courses in the department or in psychology, or consent of the instructor.

310. **Advanced Seminar: Selected Topics.**

This course may be repeated for credit with the contents changed.

Spring 1987. **Advanced Seminar on Women and Work.** Ms. Floge.

This course will explore the work of women, from the housewife to the executive. Although the focus is on work in the United States, some cross-national comparisons will be discussed. Attention will be given to the causes and consequences of the differences between men's and women's work. The three divisions of labor by sex will be examined: that within the private sphere (the home), that between the private and public spheres, and that within the public sphere of the paid labor force. The social structural constraints which perpetuate these three divisions will be examined. During the second half of the course, students present for discussion their own research in an area of their choice.

Prerequisite: Two courses in sociology or anthropology, or consent of the instructor.

290. **Intermediate Independent Study in Sociology.** Ms. Bell, Ms. Floge, Mr. McEwen, Mr. Rossides, and Mr. Wilson.

400. **Advanced Independent Study and Honors in Sociology.** Ms. Bell, Ms. Floge, Mr. McEwen, Mr. Rossides, and Mr. Wilson.

Anthropology

101. **Introduction to Anthropology.** Every fall. Ms. Lutz.

Study of human biological and cultural evolution. The four major subfields of anthropology are discussed: physical anthropology, archaeology, social linguistics, and social anthropology. Among the subjects covered are conflicting theories of human biological evolution, the debate over the genetic bases of human behavior, the scientific validity of the concept of race, the settling of the New World, the rise of agricultural and urban societies, the nature of "primitive" cultures, and the extent to which people are products of their culture.

†102. **North American Prehistory.** Spring 1987. Ms. Kaplan.

An introduction to the discipline of archaeology and the prehistory of

North American Indians. The analytical techniques used by archaeologists to reconstruct the lives of prehistoric peoples are examined. Topics include dating techniques, material culture analyses, environmental archaeology, and faunal analysis. Primary attention is devoted to a survey of the changing life ways of native Americans. Topics include when and where humans first entered the New World, how mammoth and bison hunters lived, why people began to engage in agricultural pursuits, the purpose of the huge midwestern mounds, and how New World civilizations evolved.

103. **Sociolinguistics.** Spring 1987. Ms. Lutz.

Introduction to the study of language in its social context and to the methods of sociolinguistic research and analysis. Topics include language and social interaction, the presentation of self in everyday life, techniques of linguistic persuasion, religious and political oratory, the dynamics of language use in multilingual societies, prejudice and discrimination, literacy, nationalism, and the effects of the mass media.

†131. **African-American Cultures.** Fall 1986. Ms. Bolles.

See **Afro-American Studies 101,** page 91.

[†132. **Latin American Societies.**]

133. **Modern Italy.** Spring 1989. Mr. Kertzer.

An overview of the development of modern Italian society, beginning with the unification of Italy in the mid-nineteenth century. Particular attention is paid to topics in social and political history, including the changing role of the Church and religion, the rise of the peasant leagues and the early socialist movement, life in the Fascist period, the successes and crises of the Italian Communist Party, changes in family life and in male-female relations, the enduring conflict between northern and southern Italy, and the social implications of migration.

Prerequisite: Sophomore standing.

201. **Social Anthropology.** Spring 1987. Ms. Lutz.

An examination of the methods and perspectives of social anthropology. Special emphasis on the ethics and methods of anthropological fieldwork and on contrasting styles of social anthropological analysis and interpretation.

Prerequisite: Previous course in sociology or anthropology.

[†206. **A Cross-Cultural Perspective on Families.**]

207. **Ritual and Myth.** Fall 1988. Mr. Kertzer.

Designed to provide a social scientific perspective in the study of religion. Various modes of analysis are considered, including evolutionism, functionalism, symbolic structuralism, psychoanalysis, cultural

ecology, and Marxism. A wide range of religious phenomena from diverse societies is examined, including magic, sorcery, witchcraft, shamanism, revitalization movements, cults, and civil religion. Emphasis is on the place of ritual and myth in the larger social context.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

209. **Politics, Culture, and Society.** Fall 1987. Mr. Kertzer.

The cross-cultural study of political processes, ranging from nomadic bands to nation-states. Issues examined include: How egalitarian are nonstate political systems? How is social order maintained in societies lacking centralized government? How is warfare waged? How are inequalities of political power within a society legitimized? What is the role of symbolism in political legitimation and in revolution? What social processes are involved in attracting and mobilizing political support?

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

[†224. **Women in American Society: Implications of Race, Ethnicity, and Class.**]

†231. **Native Peoples and Cultures of Arctic America.** Fall 1986. Ms. Kaplan.

For thousands of years Eskimos (Inuit), Indian, and Aleut peoples lived in the Arctic regions of North America as hunters, gatherers, and fishermen. Their clothing, shelter, food, and implements were derived from resources recovered from the sea, rivers, and the land. The characteristics of Arctic ecosystems are examined. The social, economic, political, and religious lives of various Arctic-dwelling peoples are explored in an effort to understand how people have adapted to harsh northern environments.

Prerequisite: Previous course in anthropology or sociology.

†233. **Peoples and Cultures of Southeast Asia.** Fall 1986. Ms. Lutz.

Introduction to the history and contemporary cultures of Southeast Asia. After an overview of the region's geography and ecology, considers development of state civilizations, influence of world religions (Hinduism, Buddhism, Islam, and Christianity), impact of trade, colonialism, and the world economy, and the social, economic, and political dynamics of contemporary cultures in Vietnam, Thailand, Burma, and Indonesia.

Prerequisite: Previous course in anthropology or sociology or Asian studies.

†239. **North American Indians.** Spring 1988.

An overview and analysis of American Indian societies from pre-Columbian times to the present. Topics include the political, economic,

family, and religious organization of native American societies; the impact of European expansion on Indian societies; and the current situation—both on and off reservation—of North American Indians.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

[†250. **Anthropology of Development.**]

†255. **The Black Aesthetic.** Spring 1989. Ms. Bolles.

An examination of the artistic expressions of black America in the fields of dance and the visual arts. Focus on past and contemporary black artists, the social and aesthetic reasons for their work, and their contributions to art and society. African and Caribbean materials serve as points for comparison in the African diaspora tradition. Topics include traditional Afro-American arts and crafts, painting, sculpture, graffiti, and other visual media, as well as popular and classical dance.

Prerequisite: Two courses in anthropology, sociology, or Afro-American studies or consent of the instructor.

301. **Anthropological Theory.** Spring 1988. Mr. Kertzer.

An examination of the development of various theoretical approaches to the study of culture and society. Anthropology in the United States, Britain, and France are covered from the nineteenth century to the present. Contemporary controversies in anthropological theory are discussed. Among those considered are Morgan, Tylor, Durkheim, Boas, Mauss, Malinowski, Radcliffe-Brown, Margaret Mead, and Levi-Strauss.

Prerequisite: Two courses in anthropology or consent of the instructor.

290. **Intermediate Independent Study in Anthropology.** Ms. Bolles, Ms. Kaplan, and Ms. Lutz.

400. **Advanced Independent Study and Honors in Anthropology.** Ms. Bolles, Ms. Kaplan, and Ms. Lutz.

Department of Athletics and Physical Education

Bowdoin believes that physical education is an important part of the total educational program. The Department of Athletics provides students with opportunities for satisfying experiences in physical activities for the achievement of health and physical fitness. The physical education program includes classes which emphasize instruction in sports activities with carry-over value, intramural athletics, and intercollegiate competition. Students are encouraged to use the athletic facilities to participate in free recreational play.

Intercollegiate Athletics: During the past year, Bowdoin offered intercollegiate competition in the following varsity sports: men's teams were fielded in football, cross-country, basketball, track (winter and spring), skiing, swimming, hockey, wrestling, lacrosse, tennis, baseball, soccer, and squash; women's teams were fielded in cross-country, tennis, field hockey, ice hockey, squash, skiing, swimming, track (winter and spring), soccer, basketball, lacrosse, volleyball, and softball; coed teams were offered in golf and sailing. Junior varsity or freshman teams are maintained in intercollegiate sports whenever possible.

Physical Education: The instructional program includes a wide variety of activities utilizing campus and off-campus facilities, both natural and man-made. The activities have been selected to provide the Bowdoin community (students, faculty, and staff members) with the opportunity to receive basic instruction in exercises and leisure-time activities. It is hoped that participants will develop these activities into lifelong commitments. The program varies from year to year to meet current interests.

Intramural Athletics: Men's, women's, and coeducational teams at the novice, intermediate, and advanced levels competed in touch football, indoor and outdoor soccer, indoor and outdoor volleyball, golf, bicycling, cross-country running, box lacrosse, hockey, basketball, inner-tube water polo, track, wrestling, swimming, and softball. All students and members of the faculty and staff are eligible to participate in the intramural program unless they are playing for a corresponding varsity, junior varsity, or club team.

Outdoor Facilities: The outdoor athletic facilities of the College are excellent. Whittier Field is a tract of five acres that is used for football games and also includes an all-weather track. It has a grandstand with team rooms beneath it. Pickard Field is a tract of over seventy acres that includes a base-

ball diamond; spacious playing fields for lacrosse, soccer, football, touch football, and softball; eight tennis courts; a cross-country ski track; and a field house.

Indoor Facilities: The College possesses indoor facilities that are the equal of its outstanding outdoor facilities. Morrell Gymnasium contains a modern basketball court with seats for about 2,000 persons; 2 visiting team rooms; 11 squash courts; a locker room with 480 lockers; shower facilities; a modern, fully equipped training room; adequate offices for the director of athletics and his staff; and other rooms for physical education purposes. Sargent Gymnasium includes a wrestling room, a weight-training room, a Nautilus room, a special exercise room, a regulation basketball court, a training room, and locker rooms with 470 lockers. In 1980 the third floor was renovated to become the studio for classes and rehearsals of the Bowdoin Dance Group. The Hyde Athletic Building, which is attached to the Sargent Gymnasium, includes a track, facilities for field events, a banked board track, and an infield area used for spring team practice. Completing the athletic facilities are the Curtis Swimming Pool and the Dayton Arena, which has a refrigerated ice surface 85 by 200 feet and seating accommodations for 2,600 spectators. The $3.5 million gift of William F. Farley '64 to the Campaign for Bowdoin has enabled the College to begin construction of extensive new indoor athletic facilities. The new complex at Pickard Field will be completed by spring 1987. It will house a new indoor track and tennis courts as well as a 16-lane pool.

Hawthorne-Longfellow Library

The strength of a college library rests in its collections of books and other library materials and in the ability of its staff to make the library useful to students. Bowdoin's Nathaniel Hawthorne-Henry Wadsworth Longfellow Library is exceptionally strong in its reputation as a college library. Totaling more than 750,000 volumes, its collections have been built up over a period of more than 190 years and include an unusually large proportion of distinguished and valuable volumes. Similarly distinguished has been the roster of librarians of the College, a list that includes John Abbot, Calvin Stowe, Henry Wadsworth Longfellow, and George T. Little. Its present full-time staff includes nine professional librarians and fourteen library assistants.

The first books that belonged to the library—a set of the Count Marsigli's *Danubius Pannonica-Mysicus,* given to the College in 1796 by General Henry Knox (who had been a bookseller in Boston before he achieved fame as George Washington's chief ordnance officer)—are still a part of its collections. In the early decades of the nineteenth century Bowdoin's library, largely because of extensive gifts of books from the Bowdoin family and the Benjamin Vaughan family of Hallowell, Maine, was one of the largest in the nation. It has been maintained as one of the larger college libraries of the country, but its areas of growth are now defined by the curriculum of the College and restrained by the desirability of containing it as a collection to which students can have easy, and almost complete, access. In addition to its 750,000 volumes (a count which includes bound periodicals and newspapers), the library has a collection of approximately 60,000 maps, over 2,000 photographs, and more than 400,000 manuscript items. The current annual rate of acquisition is about 17,000 volumes and the annual expenditure per student is more than $800.

The Hawthorne-Longfellow Library building was opened in the fall of 1965. The library occupies 60,000 square feet of its floor space and will eventually incorporate the 26,000 square feet presently used for the College's administrative offices. An expansion project completed in 1984 provided more seating, additional open stack shelf space, and climate control for Special Collections. The library has seating for more than 575 readers, of which over 500 are at individual study tables and carrels, and shelving to house all of its collections (with the exception of the rare materials in the Special Collections Suite) on open stacks.

The entrance level of the building contains the portions of the library of most immediate use to its readers: the circulation desk, the card catalog, reference books and bibliographies, current newspapers, current periodicals, periodical indexes, and two large and handsome reading areas. Study stations

are conveniently dispersed on this floor, as they are throughout the building.

The lower level of the library houses Bowdoin's extensive collection of bound periodicals, its collections of microfilm and other microforms, government documents, and the reserved reading shelves.

Special features of the second floor are an exhibit area and the President Franklin Pierce Reading Room, informally furnished and giving a broad view through floor-to-ceiling windows. Near this room are more newspapers and magazines for recreational reading. Also on this floor are two suites of ten faculty studies each and small rooms for student typing or group study. The rest of this floor is shelving surrounded by carrels.

More shelving and carrels occupy the principal portion of the third floor. There are nine additional faculty studies on this floor. The eastern end of the third floor is the Special Collections Suite. This includes, in addition to shelf space in a climate-controlled area for Bowdoin's rare books and manuscripts and space for their use, a conference room, and a staff and faculty lounge.

The collections of the library are strong (though inevitably of varying strength) in all areas covered by the curriculum of the College, and a constant effort is maintained to see that representative publications in fields outside the current curriculum are added to the library. There is special strength in documentary publications relating to both British and American history, in the books relating to exploration and the Arctic regions, in books by and about Carlyle, in books and pamphlets about Maine, in materials about the Huguenots, in books and pamphlets on World War I and on the history of much of middle Europe in this century, and in the literary history of pre-twentieth-century France.

The reference collection includes most of the English-language encyclopedias and a good representation in original editions of major foreign encyclopedias—from two editions of the monumental eighteenth-century *Encyclopédie* of Diderot to such modern works as the *Grand Larousse Encyclopédique, Der Grosse Brockhaus,* the *Enciclopedia Universal Illustrada Europeo-Americana,* the *Bol'shala Sovetskala Entsiklopedia,* and the *Enciclopedia Italiana de Scienze, Lettere ed Arti.* In it also are the principal national bibliographies and other major bibliographical tools. Dispersed in their proper places throughout the collections are such distinguished sets as the *Studies and Documents* of the American Institute of Musicology in Rome, Armando Cortesão's *Portugaliae Monumenta Cartographia,* the elephant-folio edition of John James Audubon's *Ornithological Biography* (his "Birds of America"), E. S. Curtis's *The North American Indian,* the *Rerum Britannicarum Medii Aevi Scriptores,* Jacques Paul Migne's *Patrologiae* (Latina), the *Scriptores Rerum Germanicum,* Reuben Gold Thwaites's *Early American Travels,* and *The Victoria History of the Counties of England.* Scholarly sets include the publications of the Camden Society, the Early English Text Society, the Egypt Exploration Society, the Geological Society of America, the Hakluyt

Society, the Henry Bradshaw Society, the Huguenot Society of London, the Prince Society, the Royal Historical Society, the Royal Society, the Scottish History Society, the Scottish Text Society, and the Société des Anciens Textes Français. Of comparable, or perhaps even greater, distinction is Bowdoin's collection of more than 90,000 bound volumes of periodical publications.

Special collections in the Hawthorne-Longfellow Library comprise extensive collections of books, manuscripts, and other materials by and about both Hawthorne and Longfellow; books and pamphlets collected by Governor James Bowdoin; the private library of James Bowdoin III; an unusually large collection of late eighteenth- and early nineteenth-century books (particularly in the sciences) collected by Maine's distinguished Vaughan family; books, periodicals, and pamphlets contemporaneous to the French Revolution; the books, papers, and memorabilia of the Abbott family; an unusually fine representation of the items published in the District of Maine and in the state during the first decade of its statehood; and the books printed by the three most distinguished presses in Maine's history: the Mosher Press, the Southworth Press, and the Anthoensen Press.

Also in the Special Collections Suite are the printed items relating to the history of the College and the chief collections of manuscript archives of the College. These include much material on Bowdoin alumni and extend far beyond a narrow definition of official college records. Here also is the library's general collection of manuscripts. Outstanding among the manuscripts are the collections of the papers of Generals O. O. Howard and Charles Howard, of Senator William Pitt Fessenden, and of Professors Parker Cleaveland, Alpheus S. Packard, Henry Johnson, and Stanley Perkins Chase; collections of varying extent of most of Bowdoin's presidents, especially Jesse Appleton, Joshua L. Chamberlain, William DeWitt Hyde, and Kenneth Charles Morton Sills; manuscripts by Kenneth Roberts, Robert Peter Tristram Coffin, Kate Douglas Wiggin, Charles Stephens, Edwin Arlington Robinson, Elijah Kellogg, and such contemporary authors as Vance Bourjaily, John Pullen, and Francis Russell.

The books and manuscripts in Bowdoin's special collections are not treated simply as museum pieces. They are freely open to use by qualified scholars and are extensively used in introducing undergraduates—in their research projects and other independent work—to the variety of research materials regularly used in the scholarly world and which they can expect to use if they continue into university graduate work.

Special collections include also the Bliss collection of books on travel, on French and British architecture, and other fine books (miscellaneous in nature but largely relating to the history of art and architecture) which are housed in the extraordinarily handsome Susan Dwight Bliss Room in Hubbard Hall. These books are additionally distinguished by their fine bindings. The books in this room and the room itself (with its Renaissance ceiling

which once graced a Neapolitan palazzo) were the gift of Miss Bliss in 1945.

During term time the library is open from 8:30 A.M. to midnight Monday through Saturday, and on Sunday from 10:00 A.M. to midnight. When the College is not in session, the library is open 8:30 A.M. to 5:00 P.M. Monday through Friday. Small departmental collections in art, biology, chemistry, mathematics, and music are housed contiguous to the offices of the departments and are available for use on separate schedules of opening.

The operations of the library and the growth of its collections are supported by the general funds of the College and by gifts from alumni and other friends of the library and of the College. The library is annually the recipient of generous gifts of both books and funds for the immediate purchase of books or other library materials. It is always especially desirous of gifts of books, manuscripts, and family records and correspondence relating to the alumni of the College. The income of more than a hundred gifts to the College as endowment is directed to the use of the library.

Bowdoin College issues a separate publication honoring those in whose names scholarships and book funds have been donated.

Bowdoin College Museums

MUSEUM OF ART

An art collection has existed at Bowdoin almost since the inception of the College itself. The earliest acquisition of major importance was a group of 141 old master drawings bequeathed to the College in 1811 by James Bowdoin III. This was the first public collection of its kind in America and contains, among many treasures, a superb landscape by Pieter Bruegel the Elder. James Bowdoin III's collection of old master paintings came to the College in 1813; the Bowdoin family portraits were given in 1826 at Mrs. Sarah Bowdoin Dearborn's bequest. In 1985, a catalogue of the old master drawings collection was published. Written by David P. Becker '70, the project was supported by the National Endowment for the Arts, the Samuel H. Kress Foundation, the J. Paul Getty Foundation, and contributions from the Museum Associates.

Although various parts of the College's art collection were on view during the first half of the nineteenth century, it was not until 1855 that a special gallery devoted to the collection came into being in the College Chapel. This gallery was made possible by a gift from Theophilus Wheeler Walker, a cousin of President Leonard Woods. It was as a memorial to Walker that his two nieces, Harriet Sarah and Mary Sophia Walker, donated funds in 1891 for the erection of the present museum building, designed by Charles Follen McKim of McKim, Mead & White. Four tympana murals of Athens, Rome, Florence, and Venice by John La Farge, Elihu Vedder, Abbott Thayer, and Kenyon Cox, respectively, decorate the museum's Sculpture Hall in the rotunda. In 1984, after careful examination of the layers of paint, the rotunda was repainted in the original McKim colors returning the space to its 1890s splendor.

The museum contains one of the most important collections extant of American colonial and federal portraits, including works by Smibert, Feke, Blackburn, Copley, Stuart, Trumbull, and Sully. Among the five examples by Robert Feke is his greatest work, the full-length likeness of *General Samuel Waldo,* generally regarded as the finest American portrait of the first half of the eighteenth century. The nine paintings by Gilbert Stuart include a portrait of *Thomas Jefferson,* as well as its pendant, *James Madison.* A complete catalogue of this collection, *Colonial and Federal Portraits at Bowdoin College,* was published by the College in 1966 with a matching grant from the Ford Foundation.

The College's collection of ancient art contains sculpture, vases, bronzes, gems, coins, and glass of all phases of the ancient world. The most notable benefactor in this area was Edward Perry Warren, the leading collector of

classical antiquities of the first quarter of the twentieth century. Five magnificent ninth-century B.C. Assyrian reliefs from the Palace of Ashurnazirpal II, the gift to the College of Henri Byron Haskell, Medical 1855, are installed in the museum's Sculpture Hall. *Ancient Art in Bowdoin College,* a descriptive catalogue of these holdings, was published in 1964 by the Harvard University Press.

In recent years the College has been the recipient of a Samuel H. Kress Study Collection of twelve Renaissance paintings; a large collection of medals and plaquettes presented by Amanda, Marquesa Molinari; a fine group of European and American pictures and decorative arts given by John H. Halford, of the Class of 1907, and Mrs. Halford; a collection of Chinese and Korean ceramics given by Governor William Tudor Gardiner and Mrs. Gardiner; and a collection of nineteen paintings and 168 prints by John Sloan bequeathed by George Otis Hamlin.

The College's Winslow Homer Collection is comprised of paintings, memorabilia pertaining to his career, and examples of his work in the graphic arts. The first painting by Homer to enter the museum, a watercolor entitled *The End of the Hunt,* was contributed by the Walker sisters from their personal collection. In the fall of 1964, a gift from the Homer family brought to Bowdoin the major portion of the memorabilia contained in the artist's studio at Prout's Neck, letters written over a period of many years to members of his family, and photographs of friends, family, and of Prout's Neck. More recently, a large collection of woodcuts was purchased to augment these holdings and create an important center for the scholarly study of Homer's life and career.

In the late 1960s and early 1970s, the museum acquired through gifts and purchase a survey collection of paintings, drawings, and prints by the American artist and illustrator Rockwell Kent.

The permanent collections also contain fine examples of the work of such nineteenth-century and twentieth-century American artists as Martin Johnson Heade, Eastman Johnson, George Inness, Thomas Eakins, John Singer Sargent, William Glackens, Marsden Hartley, Jack Tworkov, Arshile Gorky, Franz Kline, Andrew Wyeth, Leonard Baskin, and Alex Katz.

In 1982, the *Handbook of the Collections,* dedicated to the memory of John H. Halford '07, was published with the assistance of the National Endowment for the Arts, private contributions, and income from endowed funds of the College. In 1985, a comprehensive catalogue of the College's permanent collection of old master drawings was published. Authored by David P. Becker '70, the catalogue was funded in part by the National Endowment for the Arts, the J. Paul Getty Trust, and the Samuel H. Kress Foundation.

In addition to exhibitions of the permanent collections, the museum schedules an active program of temporary exhibitions of art lent by institutions and private collectors throughout the United States. Among the impor-

tant shows organized by the museum in recent years have been *500 Years of Printmaking: Prints and Illustrated Books at Bowdoin College; An Ounce of Prevention . . . Care and Conservation of Works of Art; Rocks and Crowds: Paintings by Robert Birmelin; Paintings from the William H. Lane Foundation: Modern American Masters; The Haystack Tradition: Art in Craft Media; Treasures from Near Eastern Looms; Winslow Homer Watercolors; Photographs 73-83 John McKee;* and *Old Master Drawings at Bowdoin College.*

The College lends art objects in the custody of the museum to other institutions in various parts of the United States and, occasionally, to institutions abroad. The museum also sponsors symposia and special lectures. Since 1973, symposia on American furniture, nineteenth-century decorative arts, American Indian art, nineteenth-century American architects, conservation of art, oriental rugs, and American pewter have been held.

In 1985 the Associates Program merged with other special campus support groups to become the Association of Bowdoin Friends. This organization has been established to share even more effectively the resources of the museum and campus with the community beyond the College. Its participants have access to a wide variety of activities and programs sponsored by the museum. Another vital support group of ninety-three volunteers conducts tours and assists the museum staff with clerical activities and educational programs.

The amount of space in the Walker Art Building was more than doubled in 1976 following extensive renovation made possible by gifts to the 175th Anniversary Campaign. Three galleries for exhibiting the museum's permanent collections and a temporary exhibition gallery were added on the lower level. One of the new galleries was dedicated to the memory of John H. Halford '07, another in memory of John A. and Helen P. Becker.

In 1985 and 1986, other renovation projects resulted in the installation of new skylights and lighting systems for three major upper-level galleries; construction of a climate-controlled facility for the storage of works of art on paper; ultraviolet-filtering and insulation of all windows; and construction of an air-lock vestibule at the building's main entrance. These climate control projects were supported by a generous gift from the John H. Halford Sr. Life Income Agreement and by a grant from the National Endowment for the Arts.

PEARY-MACMILLAN ARCTIC MUSEUM AND ARCTIC STUDIES CENTER

The Peary-MacMillan Arctic Museum was founded in honor of two famous arctic explorers and Bowdoin alumni, Admirals Robert E. Peary (Class of 1877) and Donald B. MacMillan (Class of 1898). On April 6, 1909, after a lifetime of arctic exploration, Peary became the first person to reach the North Pole. MacMillan was Peary's chief assistant on the 1909 expedition.

For thirty-eight years MacMillan explored Labrador, Baffin Island, Ellesmere Island, and Greenland. Twenty-six of his expeditions were made on board the *Bowdoin,* a schooner he designed for work in ice-laden northern waters. MacMillan took college students on these expeditions and introduced them to the natural history and anthropology of the North. He was not the first to involve Bowdoin students in arctic exploration, however. In 1869 Paul Chadbourne, a professor of chemistry and natural history, had sailed along the Labrador and West Greenland coasts with students from Williams and Bowdoin.

The museum, established in 1967, is located on the first floor of Hubbard Hall, for many years the Bowdoin College Library. The building was named for General Thomas Hubbard of the Class of 1857, a generous benefactor of the College and financial supporter of Peary's arctic ventures. The museum's exhibitions were designed by Ian M. White, currently director of the Fine Arts Museum of San Francisco, who sailed with MacMillan in 1950. Generous donations from members of the Class of 1925, together with gifts from George B. Knox of the Class of 1929, a former trustee, and other interested alumni and friends, made the museum a reality. Continued support from friends of the College, the Kane Lodge, and the Russell and Janet Doubleday Foundation allowed the museum to continue to grow over the next eighteen years.

The museum's collections include equipment, paintings and photographs relating to the history of arctic exploration, natural history specimens, and artifacts and drawings made by Inuit and Indians of arctic North America. The museum has large collections of ethnographic photographs recording past lifeways of native Americans taken on the expeditions of MacMillan and Robert Bartlett, an explorer and captain who plied northern waters for nearly fifty years. Diaries, logs, and correspondence relating to the museum's collections are housed in the Special Collections section of the Hawthorne-Longfellow Library.

The Arctic Studies Center was established in 1985 as a result of a generous matching grant from the Russell and Janet Doubleday Foundation to endow the directorship of the center, in recognition of the Doubledays' close relationship to MacMillan. The center links the resources of the museum and library with teaching and research efforts, and hosts traveling exhibitions, lectures, workshops, and educational outreach projects. Through course offerings, field research programs, employment opportunities, and special events the center promotes anthropological, archaeological, and environmental investigations of the North.

Language Media Center

The Language Media Center, formerly the Film, Video, and Language Laboratories, was renovated in the summer of 1985, with the help of a gift from the Pew Memorial Trust. Located in the basement of Sills Hall, the center supports the study of foreign languages by providing a fourteen-station Tandberg audio-active language laboratory, twelve individual viewing stations for VHS, Beta, and ¾-inch videocassettes (European and American standards), a shortwave receiving station, and a videodisc viewing station.

The center offers a group viewing area which accommodates up to thirty-five persons and a lobby area for informal viewing of live television transmitted from an 11′ domestic satellite dish reception system located on the roof of Morrell Gymnasium. Students are able to watch live French and Spanish language television on the C and KU bands from this system. Plans are being made for the installation during 1986 of a 24′ International Earth Station which will enable students to view live programming from Europe and the Soviet Union.

In addition, the Language Media Center provides an array of audio and video services, such as the high-speed duplication of audio tapes and the duplication of video tapes, cataloging and storage of A-V materials, and display of popular foreign language newspapers and periodicals. The center, in conjunction with the foreign language departments, also sponsors weekly foreign films on video in Smith Auditorium. Installation of a new video projection system in Smith Auditorium was completed in the spring of 1986.

Performing Arts

DRAMA

The Division of Theater Arts within the Department of English consists of the director of theater and the technical director. The main thrust of its activities is in making possible extensive extracurricular participation in the theater. The student drama group, Masque and Gown, was founded in 1903.

Credit courses in acting and directing are taught by the director of theater. Lighting and stagecraft are taught by the technical director. Each year at least three major productions are produced by the Masque and Gown on the stage of Pickard Theater. For many years one production each season has been a musical. In March 1986, *West Side Story* was presented to capacity houses. One very popular production each year is usually a Shakespeare drama or classical play. In the fall of 1985, *Taming of the Shrew* was directed by a senior. There are about eleven different productions during the school year.

Pickard Theater, the generous gift in 1955 of Frederick William Pickard, LL.D., of the Class of 1894, includes a modern, 600-seat theater with proscenium stage equipped with a hemp and counterweight system for flying scenery and an electronic lighting control system. In addition, Memorial Hall contains a scene shop and, on the lower floor, the G.H.Q. Playwrights' Theater, a 100-seat open-stage theater for experimental work by students.

Membership in the Masque and Gown results from major work on one or minor work on two of the plays produced each season. An executive committee of undergraduates elected by the members consults with the director of theater to determine the program for each year, handles publicity of the club, and organizes the production work. The Masque and Gown needs—as well as actors, actresses, and playwrights—box-office workers, publicists, directors, designers, builders, painters, electricians, stage hands, and costumers.

One of the most important activities of the club has been its encouragement of playwriting. For over fifty years the Masque and Gown has sponsored an annual student-written one-act play contest, with cash prizes. Winners have later written full-length plays, fifteen of which have been produced on campus and four professionally in New York.

DANCE

The Dance Program is organized by the director of dance and is mainly an extracurricular program designed to provide participation in various forms of dance.

The Bowdoin Dance Group, a student organization for both men and women, began in 1971 with the advent of coeducation.

Classes in dance, without academic credit, vary in response to student interest. The following areas are normally covered.

Modern dance technique: classes aimed at improving movement skills and muscular strength as well as encouraging creative understanding of movement fundamentals—rhythm, force, direction, range, and qualities of movement. Fundamentals of techniques in ballet and jazz are offered when student interest warrants.

Dance composition/choreography: exploration of dance forms, individual and group compositions, motivational factors in dance, movement themes, and dynamics. The approach to learning is through guided experimentation.

Dance performance and production: participation in and responsibility for lecture-demonstrations, workshops, and one major performance. Experience in production management, lighting, sound systems, and in combining dance with other fine arts, such as original music, art, film, and literature.

Dance repertory: development of skills in learning and performing dances, often group works, choreographed by professionals.

From time to time credit courses in dance history and dance aesthetics have been taught by the director of dance.

MUSIC

Bowdoin offers its students a variety of opportunities in music. Undergraduates participate in the Chamber Choir, College Chorale, Chamber Orchestra, Meddiebempsters, Miscellania, What Four (a barbershop quartet), and chamber music ensembles. Student instrumentalists perform in informal repertory sessions and more formal concerts of solo and chamber music.

The Chamber Choir is a mixed ensemble chosen by audition. It concentrates on the performance of serious choral literature from the Renaissance to the present. Its activities include a Christmas carol concert, occasional tours, and on-campus concerts.

The College Chorale, a large mixed chorus of students, faculty members, and townspeople, presents one major choral work with orchestra each semester. Past performances have included Schubert's *Mass in G,* Vaughn Williams's *Fantasy on Christmas Carols,* Mozart's *Vesperae Solennes,* the Bach *B-minor Mass,* and Handel's *Israel in Egypt.*

The Meddiebempsters are a men's double quartet widely known through their concerts at other colleges and European tours. On several occasions they have performed on network radio and television and have appeared in New York's Town Hall. The Miscellania are a women's augmented double quartet founded in 1972. They give joint concerts with the Meddiebempsters and, in 1977, began tours which take them to other New England campuses.

Student instrumental ensembles, appearing in numerous concerts on the

campus, have presented music by composers as diverse as Monteverdi, Corelli, Stockhausen, Gabrieli, Mozart, Terry Riley, and John Cage. Faculty performers also participate in these ensembles, offering a wide range of chamber music from past centuries, as well as mixed-media works of the avant-garde, incorporating electronics, film, slides, theater, and dance.

The Chamber Orchestra, composed primarily of students, presents concerts featuring works by a wide spectrum of composers: Bach, Beethoven, Copland, Haydn, Ives, Mozart, Schubert, and Stravinsky. The orchestra also performs with the College Chorale.

Contemporary music plays an important role in Bowdoin's musical life. Student composers may prepare performances of their own works in special concerts, using the services of student, faculty, and visiting instrumentalists. Visiting composers frequently appear on campus, and have included Elliott Carter, Milton Babbitt, Virgil Thomson, George Crumb, Pauline Oliveros, Morton Subotnick, Donald Erb, and Otto Luening. Bowdoin operates an electronic music studio with two synthesizers, tape decks, and mixing and editing facilities, used by students in the electronic music course and for independent study projects.

Bowdoin is also concerned with music composed before 1750 and has a fine collection of early instruments for student performance. Included are a number of recorders, krummhorns, cornetti, shawms, and rauschpfeifs. The collection also includes a single-manual Challis harpsichord and a dual-manual Broekman harpsichord built expressly for Bowdoin. Early music is stressed in the department's choral activities as well.

Bowdoin has three organs on campus. There is a 1927 Austin organ in the Chapel, the gift of Cyrus H. K. Curtis; a 1975 tracker action Jeremy Cooper organ, gift of Chester William Cooke III '57, in the Gibson Hall recital room; and an Allen electronic organ, gift of the Class of 1909.

When an artist is invited to perform at Bowdoin, the visit often includes discussions with small groups of students, appearances in classes, and the reading of student compositions. The Curtis-Zimbalist Concert Series, established in 1964 and the principal program through which musicians are invited to perform at Bowdoin, has included the Wesleyan University Gamelan, the Elizabethan Dance Ensemble, the Chinese Music Ensemble of New York, Joan Morris and William Bolcom, the Emmanuel Wind Quartet, the Apple Hill Chamber Players, the Lydian String Quartet, and Kurt Ollmann, baritone.

Professional teachers are available to give instruction in voice, piano, and other instruments to those students who wish to continue their study of applied music. All students of applied music are also expected to participate in ensembles. The College provides practice rooms without charge. Instrumental and music lockers are available in Gibson Hall for a small fee.

Student Life and Activities

Bowdoin provides for its students a campus life which combines traditional features of the liberal arts college with modern facilities and programs that enrich the experience of undergraduate life. The curriculum offers formal instruction in those subjects appropriate to the development of educated and enlightened citizens. Within this framework students are encouraged, and are permitted sufficient flexibility, to develop their talents and capacities for leadership. Along with the library, laboratories, art museum, visual arts center, concert and lecture halls, social center, health center, and athletic facilities, continuing attention is given to the less tangible—but more important—intellectual resources of the College. Art shows, lectures, concerts, films, and dramatic productions are all planned to provide stimulating experiences which will enhance the student's everyday work within the formal curriculum.

Honor System: A student-initiated proposal, it places complete responsibility upon the individual student for integrity in all academic work, including the use of the library. During registration, each student signs a pledge signifying that he or she understands and agrees to abide by the Bowdoin College Honor System. In so doing, the student is pledging neither to give nor to receive unacknowledged aid in any academic undertaking. Further, the student pledges, in the event that he or she witnesses a violation of the Honor System, to "take such action as he believes is consistent with his own sense of honor." Responsibility for instructing students about their obligations under the Honor System resides with the Student Judiciary Board, which also conducts hearings and recommends action in the event of a reported violation. The constitution of the Honor System and other explanatory information are published in the Bowdoin College Student Handbook.

Board members for 1986-1987 are: Matthew A. Parillo '87, Joan H. Stoetzer '87, Adam S. Weinberg '87, Andrew S. Murray '88, and Samuel B. Shepherd '88. Alternates: Lindsey R. Baden '87 and Amy H. Chavinson '88.

Social Code: A Bowdoin College Social Code developed by the cooperative efforts of students and faculty members governs undergraduate behavior on the campus. Each student is required to subscribe to the Social Code at registration just as he or she accepts the Honor Code.

Primary responsibility is placed upon each student for the conduct of his or her life. However, the college environment inevitably demands social responsibility from every student. The introduction to the code states: "The success of the Social Code requires the active commitment of all members of the community to the principles on which life at Bowdoin is based."

The responsibility to create a harmonious community among students with different backgrounds and conflicting private views of morality is given, in the first place, to the students. When conflicts arise between students, the code suggests that they be settled on the local level where they originate. Persistent and serious violations of this Social Code may be brought to the attention of the Dean of Students and eventually to the Student Judiciary Board for action.

Living and Dining Accommodations: The College provides living and dining accommodations for its students. Entering freshmen live in housing owned by the College. Most students dine at Moulton Union or Wentworth Hall. Those electing to join coeducational fraternities will, after the first few days, normally take their meals at the fraternity house. Students who request and accept room accommodations in the fall are obligated to pay a full academic year's rent for those accommodations. Further, students who live in campus dormitories or fraternities are required to hold a regular board bill with the Centralized Dining Service. Students living in College apartments are not required to take a regular board bill. The fraternity chapter houses furnish dining accommodations for their members and living accommodations for a proportion of the sophomore and junior classes (the final arrangements for living quarters being contingent upon the size of enrollment and other factors).

Moulton Union: The Union is the community center of the College.

The main lounge is arranged for informal use as well as college gatherings: lectures, recitals, receptions, and banquets. The Lancaster Lounge, in the wing opposite the main lounge, and a smaller lounge add flexibility to the main floor area. Also on this floor are the scheduling and information desk and the campus telephone switchboard.

A large, self-service bookstore, which features a broad selection of paperbacks, is located in the southeast corner on the main floor and supplies textbooks and sundries to members of the College.

Extracurricular activities such as the Student Executive Board, the Camera Club, and WBOR have headquarters in the Union. The Career Services Office is on the second floor of the building.

On the lower floor, food service is provided in a variety of dining rooms, one of which serves as a banquet room for groups of less than one hundred. The Bear Necessity, opened in 1981, provides an informal gathering place for members of the College community. A light supper menu and entertainment are available. Also on this floor are a game room, a darkroom, a mail room, and an automated bank teller machine.

The formulation of policies and the planning of the many-sided program of activities are the responsibility of the student activities coordinator and the Student Union Committee. By sponsoring concerts, art exhibitions, tourna-

ments, and other entertainments, the committee contributes to the social life of the entire college community.

Coeducational Fraternities: Approximately 40 percent of all Bowdoin students join one of the coeducational fraternities some time in their career at the College. Membership is open to all undergraduates. One-third of the upperclass fraternity members live in the fraternity houses, which are located adjacent to the campus and are owned and operated by alumni house corporations. Most other members live in college housing, but often take meals in their fraternity dining rooms during the freshman, sophomore, and junior years. All Bowdoin social and safety regulations apply to fraternity members.

Fraternities are an important part of the undergraduate life of the College, particularly for members, providing a focus for social activities. In addition, fraternity members enjoy the many benefits derived from the sharing of educational concerns and daily living experiences within the fraternities. Membership affords students an opportunity to assume significant responsibilities in self-governance within the fraternity organizations, and offers exposure to the history and traditions of the fraternities and the College.

Student Executive Board: Student social life at Bowdoin, the running of student organizations, and the gathering of student opinion to advise faculty and administrators on issues of general campus concern are entrusted to the students themselves. Undergraduate self-government is vested in the Student Executive Board, which makes recommendations about student affairs to the student body and to the faculty. In addition, the Student Executive Board participates in the broader governance of the campus through representatives chosen by the board to be members of the various committees of the faculty and the Governing Boards.

Student Judiciary Board: The Student Judiciary Board is responsible for maintaining college standards of behavior through the enforcement of the Honor System and the Social Code. The board conducts administrative hearings on suspected misconduct and renders its findings to the dean of students in the form of recommendations. The board comprises three seniors and two juniors, all selected by the Student Judiciary Board with the approval of the Student Executive Board.

Student Representatives to Committees of the Faculty and Governing Boards: Most of the committees of the faculty and Governing Boards have invited student representatives to be voting members and to sit with them in their deliberations. This representation has facilitated the exchange of information and points of view between the various constituencies of the College.

Board of Proctors: The maintenance of order in the dormitories, the general comfort of dormitory residents, and informal peer counseling are the responsibility of the proctors, who are appointed by the dean of students.

Organizations

Afro-American Society: The Afro-American Society, formed in 1968, was created to preserve, establish, and promote the Afro-American heritage within the Bowdoin community. Educational, cultural, and social activities are generally focused on the special experiences of Afro-Americans. Membership is available to all students who share similar interests. The general public is invited to participate in the Afro-American Society's varied activities throughout the year. In cooperation with student and faculty groups, the society has regularly sponsored educational programs, cultural expressions, and general entertainment for the benefit of the entire community.

Alcohol Peer Advisors: The Alcohol Peer Advisors are students who have been given accurate information about alcohol and its effects on fellow students, friends, and family. APAs are willing to listen to fellow students and can act as a referral link to other resources available on campus and in the community. APAs have also developed an outreach program with the goal of educating the Bowdoin community about alcohol-related issues.

Amnesty International: A campus chapter of the Nobel Prize-winning human rights organization. In addition to working for the release of prisoners of conscience, the group is concerned with promoting human rights education throughout the campus.

Bowdoin Dance Group: The group sponsors visiting performers, gives informal concerts or lecture/demonstrations, and presents a major spring performance of student works.

Bowdoin Film Society: The BFS sponsors films throughout the school year. Some of the box office proceeds are used to buy films for the permanent collection.

Bowdoin Friendship Program: The program is designed to help familiarize incoming freshmen with Bowdoin on a personal level. Incoming freshmen are paired with an upperclassman who is expected to be available for advice and friendship throughout the freshman year.

Bowdoin Gay/Lesbian-Straight Alliance: The alliance has two primary functions: to provide a space for all members of the college community and area residents to discuss relationships, families, love, and sexuality; and to establish a social and political support network for nonheterosexual participants. The alliance presents a number of films and lectures every year.

Bowdoin Growler: The *Bowdoin Growler* is the college humor magazine. Published twice yearly, it includes stories, poems, photographs, cartoons, and parodies of all aspects of campus life.

Bowdoin Literary Society: The group sponsors lectures, poetry readings, and other events centered around literature.

Bowdoin Rugby Club: The club sponsors rugby matches with teams from other colleges and independent teams.

Bowdoin Women's Association: The BWA sponsors lectures on topics of interest to the entire college community as well as informal gatherings where Bowdoin women can get to know one another and discuss their Bowdoin experiences. The BWA has an office in the Women's Resource Center at 24 College Street.

Bugle: The *Bugle* is the college yearbook.

Chapel Talks Program: Organized and directed by students, the program offers an opportunity for members of the community to meet weekly in the Chapel to contemplate and question talks delivered on a wide variety of topics.

College Republicans: A conservative political organization open to students of any and all party affiliations. The group sponsors speakers, has social activities, and publishes the *Patriot*.

Interfraternity Council: The presidents of the fraternities meet regularly to discuss common problems and to review ways in which fraternities at Bowdoin may contribute more effectively to undergraduate life.

International Club: The club sponsors a broad range of intercultural events, including dances, lectures, and dinners, and helps facilitate exchange between students of varying backgrounds with international interests.

Kamerling Society: Named in honor of the late Samuel E. Kamerling, Charles Weston Pickard Professor of Chemistry, the society is Bowdoin's student chapter affiliated with the American Chemical Society. The society sponsors lectures, films, and seminars for the college community.

Masque and Gown: This college dramatic organization has for more than eighty seasons provided undergraduates with opportunities to give practical expression to their interest in the theater. The Executive Committee shall continue its policy of producing full-length and one-act plays and of sponsoring the annual student-written one-act play contest; the committee also uses various experimental production techniques. Under the direction of the director of theater and housed in Pickard Theater, the Masque and Gown offers many opportunities for those interested in playwriting, scene design and construction, acting, and business management and publicity.

Music: Music activities include the Meddiebempsters, a men's augmented double quartet; the Miscellania, a women's augmented double quartet; the What Four, a barbershop quartet; Mainstay, a coed singing group; the Bow-

doin Swing Band; the Wind Ensemble; the Chamber Choir; the Chorale; the Bowdoin Precision Marching Band; and the Chamber Orchestra.

Orient: The *Bowdoin Orient,* the college newspaper, is now in its 112th year of continuous publication. There are opportunities for freshmen as reporters and for newcomers at the news desk, and advancement on the staff is rapid for those with a flair for journalism. Students interested in the business management of the newspaper will also find opportunities for work and advancement. The club also provides leadership training workshops for members of the college community.

Outing Club: Organized in 1948, the Outing Club sponsors a program of outdoor activities including rock and mountain climbing, cycling, canoeing, and cross-country skiing.

Paracelsus Society: A biological and natural science society which presents lectures, seminars, and films.

Quill: The *Quill* is the college literary publication and is normally published once each semester. Each issue contains articles in all fields of student literary interest: short stories, essays, poems, and reviews. Contributions are welcomed from all members of the College.

Radio: In WBOR, "Bowdoin-on-Radio," the College has a well-equipped FM radio station as the result of a gift from the Class of 1924. Situated on the second floor of the Moulton Union, both studios and the control room are sealed against disturbances of sound with acoustical tiling and sound-lock doors. The student-operated station broadcasts daily when the College is in session. Positions as announcers, engineers, newscasters, and sportscasters are numerous and open to any student who has an FCC Third Class Permit with broadcast endorsement.

Religious Life: Religious activities at Bowdoin are organized by the students. In recent years the Bowdoin Christian Fellowship, the Bowdoin Jewish Organization, and the Newman Association have been active. Each has planned activities appropriate to its membership.

Sexual Harassment Student Support Group: The support group provides information about the issue of sexual harassment. Members of the group act as peer counselors and are a referral link to resources both within and outside the Bowdoin community.

Struggle and Change: A political organization whose goal is to raise issues on campus about the larger society in which we live. Such issues include nuclear power and apartheid. The group sponsors speakers, has weekly discussions, and publishes *To the Root,* an alternative political newspaper.

Student Union Committee: A committee of elected members which or-

ganizes, coordinates, and sponsors a number of campus-wide social activities including lectures, dances, parties, and concerts.

Thymes: The *Bowdoin Thymes* is the daily newspaper/calendar of the college. It is a publication of the Office of Public Relations and Publications and employs two undergraduates as coeditors. Each weekday the *Thymes* is printed and delivered to dormitories, fraternities, and other buildings on campus.

Voluntary Service Programs: A wide range of social service activities are undertaken by students. Their voluntary nature is their essential characteristic. Students participating in them receive no compensation or academic credit. Each of the major programs is coordinated by a student leader, and the smaller or individual activities are organized by the voluntary service programs coordinator.

Currently these activities include the Big Brother-Big Sister program, which provides companionship and activities for children of elementary and junior high school age; a program of assistance to area retarded citizens; programs which seek to help the elderly and infirm in the region; the Regional Hospital Program for those considering careers in medicine; a school tutoring program; Bowdoin Undergraduate Teachers, which is of particular interest to those interested in a teaching career since it provides opportunities for direct participation in local school classrooms; the Bath Children's Home Program, in which students offer friendship and academic assistance to youngsters living in a group home; and Project BASE (Bowdoin and Sweetser exchange), which offers an opportunity to work with emotionally disturbed children at a residential school.

Wherefore Art: This organization sponsors a variety of events focused on art, including films, lectures, museum trips, and discussions.

Young Democrats: A partisan organization which welcomes people from all parts of the political spectrum to participate. The group's goal is to promote political awareness on campus by sponsoring speakers and debates.

Career Services

The Office of Career Services (OCS) complements the academic mission of the College. By increasing students' awareness of the skills they are developing through a liberal arts education, career counselors reinforce the academic focus of students' experiences at Bowdoin. At the same time, OCS seeks to dispel misconceptions about the connection between specific courses or majors and career options.

Major goals of OCS are to help undergraduates and alumni/ae better understand themselves in relation to the world of work and to introduce them to the process of career planning. In so doing, OCS assists students in their transition to work or graduate study and prepares them to deal with later career and life decisions.

A staff of four is available for individual career counseling. Workshops and presentations throughout the academic year offer assistance in identifying skills, selecting a major, locating internship and summer job prospects, and refining job hunting techniques. In counseling style and program content, OCS addresses the needs of those with diverse interests, attitudes, and expectations. Each year, more than fifty companies, sixty graduate schools, and several secondary schools participate in on-campus recruiting programs. Bowdoin is also a member of interviewing consortia in Maine, Boston, and New York City, which affords additional employment interviews for our undergraduates.

Alumni and parents are regularly involved both on and off campus in special programs designed to enhance students' understanding of the job market and to broaden their awareness of career options. A fall Career Day, presentations on specific career fields, and on-campus interviews highlight this involvement. In addition, a computerized network allows the staff to refer students to alumni/ae and parents in locations and professions of particular interest.

The office continually updates two resource centers, located in the Moulton Union and in the Department of Education, which house materials on specific careers, companies and organizations, graduate schools, and internship opportunities. A weekly newsletter publicizes all OCS events and programs in addition to internship and job openings.

Position of Fellow: Each year the College extends opportunities for graduating seniors to serve and to learn in one-year intern positions. These posts have been available within the following offices: Dean of Students, Admissions, Financial Aid, Development, and Public Relations and Publications. Not only do the interns benefit from a broad administrative exposure, including a variety of assignments, but the College gains from the availability of opinions and experiences of these recent students in forming new policies, procedures, and programs.

Prizes and Distinctions

The Bowdoin Prize: A fund, now amounting to $66,236, established as a memorial to William John Curtis, LL.D., of the Class of 1875, by his wife and children. The prize, four-fifths of the total income not to exceed $10,000, is to be awarded "once in each five years to the graduate or former member of the College, or member of its faculty at the time of the award, who shall have made during the period the most distinctive contribution in any field of human endeavor. The prize shall only be awarded to one who shall, in the judgment of the committee of award, be recognized as having won national and not merely local distinction, or who, in the judgment of the committee, is fairly entitled to be so recognized." (1928)

The first award was made in 1933 and the most recent in 1985. Recipient of the award in 1985 was Joan Benoit Samuelson, A.B., of the Class of 1979.

UNDERGRADUATE PRIZES

Prizes in General Scholarship

Brooks-Nixon Prize Fund: A fund established by Percy Willis Brooks, of the Class of 1890, and Mary Marshall Brooks. The annual income is awarded each year as a prize to the best Bowdoin candidate for selection as a Rhodes scholar. (1975)

Brown Memorial Scholarships: A fund for the support of four scholarships in Bowdoin College given by the Honorable J. B. Brown, of Portland, in memory of his son, James Olcott Brown, A.M., of the Class of 1856. According to the provisions of this foundation, a prize will be paid annually to the best scholar in each undergraduate class who shall have graduated at the high school in Portland after having been a member thereof not less than one year. The awards are made by the City of Portland upon recommendation of the College. (1865)

Almon Goodwin Prize Fund: This fund was established by Mrs. Maud Wilder Goodwin in memory of her husband, Almon Goodwin, of the Class of 1862. The annual income is awarded to a member of Phi Beta Kappa chosen by vote of the Board of Trustees of the College at the end of the recipient's junior year. (1906)

George Wood McArthur Prize: A fund bequeathed by Almira L. McArthur, of Saco, in memory of her husband, George Wood McArthur, of the Class of 1893. The annual income is awarded as a prize to that member of the graduating class who, coming to Bowdoin as the recipient of a pre-

matriculation scholarship, shall have attained the highest academic standing among such recipients within the class. (1950)

Leonard A. Pierce Memorial Prize: A prize, established by friends and associates. It is awarded annually to that member of the graduating class who is continuing his or her education in an accredited law school and who attained the highest scholastic average during his or her years in college. It is paid to the recipient upon enrollment in law school. (1960)

Departmental Prizes

Art History Junior-Year Prize: A prize funded annually by a donor wishing to remain anonymous and awarded to a student judged by the Department of Art to have achieved the highest distinction in the major program in art history and criticism at the end of the junior year. (1979)

Art History Senior-Year Prize: A prize established by a donor wishing to remain anonymous and awarded to a graduating senior judged by the Department of Art to have achieved the highest distinction in the major in art history and criticism. (1982)

Philip C. Bradley Spanish Prize: A prize established by classmates and friends in memory of Philip C. Bradley 1966 is awarded to outstanding students in Spanish language and literature. (1982)

Sue Winchell Burnett Music Prize: A prize established by Mrs. Rebecca P. Bradley in memory of Mrs. Sue Winchell Burnett. It is awarded upon recommendation of the Department of Music to that member of the senior class who has majored in music and has made the most significant contribution to music while a student at Bowdoin. If two students make an equally significant contribution, the prize will be divided equally between them. (1963)

Class of 1875 Prize in American History: A prize established by William John Curtis, LL.D., of the Class of 1875, is awarded to the student who writes the best essay and passes the best examination on some assigned subject in American history. (1901)

Dorothy Haythorn Collins Award: An award from the estate of Dorothy Haythorn Collins and from her family to the Society of Bowdoin Women. Each year the society selects a department from the sciences, the social studies, and the humanities. The selected department chooses a student to honor by purchasing a book and placing it with a nameplate in the department library. The student also receives a book and certificate of merit. (1985)

Copeland-Gross Biology Prize: A prize named in honor of two former Josiah Little Professors of Natural Science, Manton Copeland and Alfred Otto Gross, Sc.D., is awarded to that graduating senior who has best

exemplified the idea of a liberal education during the major program in biology. (1972)

Philip W. Cummings Philosophy Prize: A prize awarded to the most deserving student in the Department of Philosophy. The prize was given by Gerard L. Dube of the Class of 1955 in memory of his friend and classmate. (1984)

Hannibal Hamlin Emery Latin Prize: A prize is awarded to a member of the junior or senior class for proficiency in Latin. (1922)

Fessenden Prize in Government: A prize given by Richard Dale, of the Class of 1954, is awarded by the Department of Government to that graduating senior who as a government major has made the greatest improvement in studies in government, who has been accepted for admission into either law or graduate school or has been accepted for employment in one of certain federal services, and who is a United States citizen. (1964)

Goodwin French Prize: A prize given by the Reverend Daniel Raynes Goodwin, D.D., of the Class of 1832, is awarded to the best scholar in French. (1890)

Nathan Goold Prize: A prize established by Abba Goold Woolson, of Portland, in memory of her grandfather. It is awarded to that member of the Senior Class who has, throughout the college course, attained the highest standing in Greek and Latin studies. (1922)

Edwin Herbert Hall Physics Prize: A prize, named in honor of Edwin Herbert Hall, LL.D., of the Class of 1875, the discoverer of the Hall Effect, is awarded each year to the best sophomore scholar in the field of physics. (1953)

Edward Sanford Hammond Mathematics Prize: A book is awarded on recommendation of the Department of Mathematics to a graduating senior who is completing a major in mathematics with distinction. Any balance of the income from the fund may be used to purchase books for the department. The prize honors the memory of Edward S. Hammond, for many years Wing Professor of Mathematics, and was established by his former students at the time of his retirement. (1963)

Jefferson Davis Award: A prize consisting of the three-volume *Jefferson Davis* by Hudson Strode and the annual income of a fund is awarded to the student excelling in constitutional law. (1973)

Sumner Increase Kimball Prize: A prize established by Sumner Increase Kimball, Sc.D., of the Class of 1855, is awarded to that member of the senior class who has "shown the most ability and originality in the field of the Natural Sciences." (1923)

Eaton Leith French Prize: The annual income of a fund awarded to that member of the sophomore or junior class who, by his or her proficiency and scholarship, achieves outstanding results in the study of French literature. The prize was established in 1962 and endowed in 1966 by James M. Fawcett III, of the Class of 1958, to honor Eaton Leith, professor of Romance languages emeritus. (1962)

Anne Bartlett Lewis Memorial Fund: The annual income of a fund for demonstrations of excellence in art history and creative visual arts by two students enrolled as majors in the Department of Art. The fund was established by her husband, Henry Lewis, and her children, William H. Hannaford, David Hannaford, and Anne D. Hannaford. (1981)

Noel C. Little Prize in Experimental Physics: A prize named in honor of Noel C. Little, Sc.D., of the Class of 1917, professor of physics emeritus, and Josiah Little Professor of Natural Science Emeritus, to be awarded to a graduating senior who has distinguished himself or herself in experimental physics. (1968)

Charles Harold Livingston Honors Prize in French: An award to encourage independent scholarship in the form of honors theses in French. The fund was established by former students of Charles Harold Livingston, Longfellow Professor of Romance Languages, upon the occasion of his retirement. (1956)

Donald and Harriet S. Macomber Prize in Biology: A fund established by Dr. and Mrs. Donald Macomber in appreciation for the many contributions of Bowdoin in the education of members of their family—David H. Macomber '39, Peter B. Macomber '47, Robert A. Zottoli '60, David H. Macomber, Jr. '67, and Steven J. Zottoli '69. The income of the fund is to be awarded annually as a prize to the outstanding student in the Department of Biology. If, in the opinion of the department, in any given year there is no student deemed worthy of this award, the award may be withheld and the income for that year added to the principal of the fund. (1967)

Philip Weston Meserve Fund: A prize in memory of Professor Philip Weston Meserve, of the Class of 1911, "to be used preferably to stimulate interest in Chemistry." (1941)

James Malcolm Moulton Prize in Biology: The income of a fund given by former students and other friends in honor of the George Lincoln Skolfield, Jr., Professor of Biology Emeritus, to provide a book prize to be awarded annually to the outstanding junior majoring in biology, as judged by scholarship and interest in biology. At the discretion of the Department of Biology, this award may be made to more than one student or to none in a given (1984)

Noyes Political Economy Prize: A prize established by Crosby Stuart Noyes, A.M. (Bowdoin, 1887), is awarded to the best scholar in political economy. (1897)

The Old Broad Bay Prizes in Reading German: The income from a fund given by Jasper J. Stahl, Litt.D., of the Class of 1909, and by others to be awarded to students who in the judgment of the department have profited especially from their instruction in German. The fund is established as a living memorial to those remembered and unremembered men and women from the valley of the Rhine who in the eighteenth century founded the first German settlement in Maine at Broad Bay, now Waldoboro. (1964)

Pray English Prize: A prize given by Thomas Jefferson Worcester Pray, M.D., of the Class of 1844, is awarded to the best scholar in English literature and original English composition. (1889)

Sewall Greek Prize: A prize given by Jotham Bradbury Sewall, S.T.D., of the Class of 1848, formerly professor of Greek in the College, is awarded to the member of the sophomore class who sustains the best examination in Greek. (1879)

Sewall Latin Prize: A prize given by Professor Sewall is awarded to the member of the sophomore class who sustains the best examination in Latin. (1879)

David Sewall Premium: A prize is awarded to a member of the freshman class for excellence in English composition. (1795)

Bertram Louis Smith, Jr., Prize: A fund established from the bequest of Bertram Louis Smith, in memory of his son, a member of the Class of 1903, to encourage excellence of work in English literature. The annual income of this fund is awarded by the department to a member of the junior class who has completed two years' work in English literature. Ordinarily, it is awarded to a student majoring in English, and performance of major work as well as record in courses is taken into consideration. (1925)

Smyth Mathematical Prize: The gift of Henry Jewett Furber, of the Class of 1861, named by him in honor of Professor William Smyth. A prize is given to that student in each sophomore class who obtains the highest grades in mathematics courses during the first two years. The prize is awarded by the faculty of the Department of Mathematics, which will take into consideration both the number of mathematics courses taken and the level of difficulty of those courses in determining the recipient. The successful candidate receives one-third of the prize at the time the award is made. The remaining two-thirds is paid to him or her in installments at the close of each term during junior and senior years. If a vacancy occurs during those years,

the income of the prize goes to the member of the winner's class who has been designated as the alternate recipient by the department. (1876)

Lea Ruth Thumim Biblical Literature Prize: A prize given by Carl Thumim in memory of his wife, Lea Ruth Thumim, is awarded each year by the Department of Religion to the best scholar in biblical literature. (1959)

Prizes in Debating and Speaking

Edgar Oakes Achorn Prize Fund: The income of a fund is distributed as prizes to the winning team in an annual debate between the sophomore and freshman classes. If this debate should fail in interest or scholastic benefit, the prizes may, at the discretion of the faculty, be withdrawn, and the income awarded annually as a prize for the best essay by a member of the sophomore or freshman classes on "Chapel Exercises, Their Place at Bowdoin"; or on any other subject germane to the place of religion in a liberal education. (1932)

Bradbury Debating Prize: The annual income of a fund given by James Ware Bradbury, LL.D., of the Class of 1825, is awarded for excellence in debating. First team, two-thirds of the income; second team, one-third of the income. (1901)

Hiland Lockwood Fairbanks Prize Fund: This fund was established by Captain Henry Nathaniel Fairbanks, of Bangor, in memory of his son Hiland Lockwood Fairbanks, of the Class of 1895. Of the annual income one-half is awarded as a single prize for excellence in **English 11** and the remaining one-half, in a two-to-one ratio, is awarded as first and second prizes to the two outstanding students in **English 10.** (1909)

Stanley Plummer Prizes: The annual income of a fund established by Stanley Plummer, of the Class of 1867, is awarded to the two outstanding students in **English 12.** First and second prizes are awarded in a two-to-one ratio. (1919)

Commencement Prizes

DeAlva Stanwood Alexander Prize: Established by DeAlva Stanwood Alexander, LL.D., of the Class of 1870, this fund furnishes two prizes for excellence in select declamation. (1908)

Classes of 1868 Prize: Contributed by the Class of 1868, this prize is awarded for a written and spoken oration by a member of the senior class. (1868)

Goodwin Commencement Prize: Established by the Reverend Daniel Raynes Goodwin, D.D., of the Class of 1832, the prize is awarded for a written or oral presentation at Commencement. (1882)

Essay Prizes

Philo Sherman Bennett Prize Fund: This fund was established by William Jennings Bryan from trust funds of the estate of Philo Sherman Bennett, of New Haven, Connecticut. The income is used for a prize for the best essay discussing the principles of free government. Competition is open to juniors and seniors. (1905)

Brown Composition Prizes: Two prizes from the annual income of a fund established by Philip Greely Brown, A.M., of the Class of 1877, in memory of Philip Henry Brown, Esq., A.M., of the Class of 1851, are offered to members of the senior class for excellence in extemporaneous English composition. (1874)

General R. H. Dunlap Prize: This fund was established by Katharine Wood Dunlap in memory of her husband, Robert H. Dunlap, Brigadier General, U.S.M.C. The annual income is to be awarded to the student who writes the best essay on the subject of "service." (1970)

Horace Lord Piper Prize: A prize established by Sumner Increase Kimball, Sc.D., of the Class of 1855, in memory of Major Horace Lord Piper, of the Class of 1863. It is awarded to that member of the sophomore class who presents the best "original paper on the subject calculated to promote the attainment and maintenance of peace throughout the world, or on some other subject devoted to the welfare of humanity." (1923)

Prizes in Creative Arts

Bowdoin Orient Prizes: Six cash prizes are offered by the Bowdoin Publishing Company and are awarded each spring to those members of the *Bowdoin Orient* staff who have made significant contributions to the *Orient* in the preceding volume. (1948)

Abraham Goldberg Prize: The income from a bequest of Abraham Goldberg, this prize is awarded annually to that member of the senior class who, in the opinion of a faculty committee headed by the director of theater, has shown, in plays presented at the College during the two years preceding the date of award, the most skill in the art of designing or directing. (1960)

Hawthorne Prize: The income of a fund given in memory of Robert Peter Tristram Coffin, Litt.D., of the Class of 1915, Pierce Professor of Literature, and in memory of the original founders of the Hawthorne Prize: Nora Archibald Smith and Kate Douglas Wiggin, Litt.D. It is awarded each year to the author of the best short story. The competition is open to members of the sophomore, junior, and senior classes. (1903)

Masque and Gown Figurine: A figurine, "The Prologue," carved by Gregory Wiggin, is presented annually to the author of the prize-winning play in the One-Act Play Contest, and held by the winner until the following contest. (1937)

Masque and Gown One-Act Play Prizes: Cash prizes are awarded annually for excellence in various Masque and Gown activities, including playwriting, directing, and acting. (1934)

Alice Merrill Mitchell Prize: A prize given by Wilmot Brookings Mitchell, L.H.D., of the Class of 1890, Edward Little Professor of Rhetoric and Oratory, in memory of his wife, Alice Merrill Mitchell, is awarded annually to that member of the senior class who, in the opinion of a faculty committee headed by the director of theater, has shown, in plays presented at the College during the two years preceding the date of award, the most skill in the art of acting. (1951)

William H. Moody '56 Award: A fund established in memory of Bill Moody, who for many years was the theater technician and friend of countless students. The award is presented annually, if applicable, to one or more upperclassmen having made outstanding contributions to the theater through technical achievements accomplished in good humor. The award should be an appropriate memento of Bowdoin. (1980)

Poetry Prize: The annual income of a fund is given each semester for the best poem on Bowdoin written by an undergraduate. (1926)

George H. Quinby Award: Established in honor of "Pat" Quinby, for thirty-one years director of dramatics at Bowdoin College, by his former students and friends in Masque and Gown, the award is presented annually to one or more freshman members of Masque and Gown who make an outstanding contribution through interest and participation in Masque and Gown productions. The recipients are selected by the director of theater, the theater technician, and the president of Masque and Gown. (1967)

Forbes Rickard, Jr., Poetry Prize: A prize given by a group of alumni of the Bowdoin chapter of Alpha Delta Phi Fraternity in memory of Forbes Rickard, Jr., of the Class of 1917, who lost his life in the service of his country, is awarded to the undergraduate writing the best poem. (1919)

Mary B. Sinkinson Short Story Prize: A prize established by John Hudson Sinkinson, of the Class of 1902, in memory of his wife, Mary Burnett Sinkinson, is awarded each year for the best short story written by a member of the junior or senior class. (1961)

Paul Andrew Walker Prize Fund: Established in honor and memory of Paul Andrew Walker, of the Class of 1931, by his wife, Nathalie L. Walker,

forty percent of the income of the fund is used to honor a member or members of the *Bowdoin Orient* staff whose ability and hard work are deemed worthy by the Award Committee chosen by the Dean of the College. A bronze medal or an appropriate book, with a bookplate designed to honor Paul Andrew Walker, is presented to each recipient. (1982)

Awards for Character and Leadership

Women's Basketball Alumnae Award: A bowl, inscribed with the recipient's name, given to the player who "best exemplifies the spirit of Bowdoin Women's Basketball, combining talent with unselfish play and good sportsmanship." The award is presented by Bowdoin alumnae basketball players. (1983)

Society of Bowdoin Women Athletic Award: An award presented each May to a member of a women's varsity team in recognition of her "effort, cooperation, and sportsmanship." Selection is made by a vote of the Department of Athletics and the Dean of Students. (1978)

Leslie A. Claff Track Trophy: A trophy presented by Leslie A. Claff, of the Class of 1926, to be awarded "at the conclusion of the competitive year to the outstanding performer in track and field athletics who, in the opinion of the Dean, the Director of Athletics, and the Track Coach, has demonstrated outstanding ability accompanied with those qualities of character and sportsmanship consistent with the aim of intercollegiate athletics in its role in higher education." (1961)

Annie L. E. Dane Trophy: Named in memory of the wife of Francis S. Dane, of the Class of 1896, and mother of Nathan Dane II, of the Class of 1937, Winkley Professor of Latin Language and Literature, the trophy is awarded each spring to a senior member of a varsity women's team who "best exemplifies the highest qualities of character, courage, and commitment to team play." (1978)

Francis S. Dane Baseball Trophy: A trophy presented to the College by friends and members of the family of Francis S. Dane, of the Class of 1896, is awarded each spring "to that member of the varsity baseball squad who, in the opinion of a committee made up of the Dean of the College, the Director of Athletics, and the Coach of Baseball, best exemplifies high qualities of character, sportsmanship, and enthusiasm for the game of baseball." (1965)

William J. Fraser Basketball Trophy: The William J. Fraser Basketball Trophy, presented by Harry G. Shulman, A.M. (Bowdoin 1971), in memory of William J. Fraser, of the Class of 1954, is awarded annually to that member of the basketball team who best exemplifies the spirit of Bowdoin basketball.

The recipient is selected by the coach, the athletic director, and the Dean of the College. (1969)

Andrew Allison Haldane Cup: A cup given by fellow officers in the Pacific in memory of Captain Andrew Allison Haldane, USMCR, of the Class of 1941, awarded to a member of the senior class who has outstanding qualities of leadership and character. (1945)

Lucien Howe Prize: A fund given by Lucien Howe, M.D., Sc.D., of the Class of 1870. Fifty dollars from the income is awarded by the Faculty to that member of the Senior Class who as an undergraduate, by example and influence has shown the highest qualities of gentlemanly conduct and character, the award to be either in cash or in the form of a medal, according to the wish of the recipient. The remainder is expended by the president to improve the social life of the undergraduates. (1920)

Winslow R. Howland Football Trophy: A trophy presented to the College by his friends in memory of Winslow R. Howland, of the Class of 1929, is awarded each year to that member of the varsity football team who has made the most marked improvement on the field of play during the football season, and who has shown the qualities of cooperation, aggressiveness, enthusiasm for the game, and fine sportsmanship so characteristic of Winslow Howland. (1959)

Elmer Longley Hutchinson Cup: A cup given by the Bowdoin chapter of Chi Psi Fraternity in memory of Elmer Longley Hutchinson, of the Class of 1935, is awarded annually to a member of the varsity track squad for high conduct both on and off the field of sport. (1939)

Samuel A. Ladd Tennis Trophy: A trophy presented by Samuel Appleton Ladd, Jr., of the Class of 1929, and Samuel Appleton Ladd III, of the Class of 1963, awarded to a member of the varsity team who during the year by his sportsmanship, cooperative spirit, and character has done the most for tennis at Bowdoin. The award winner's name is to be inscribed on the trophy. (1969)

George Levine Memorial Soccer Trophy: A trophy presented by Lieutenant Benjamin Levine, coach of soccer in 1958, is awarded to that member of the varsity soccer team exemplifying the traits of sportsmanship, valor, and desire. (1958)

Robert B. Miller Trophy: A trophy, given by former Bowdoin swimmers, in memory of Robert B. Miller, coach of swimming, is awarded annually "to the Senior who, in the opinion of the coach, is the outstanding swimmer on the basis of his contribution to the sport." Winners will have their names inscribed on the trophy and will be presented with bronze figurines. (1962)

Hugh Munro, Jr., Memorial Trophy: A trophy given by his family in mem-

ory of Hugh Munro, Jr., of the Class of 1941, who lost his life in the service of his country. It is inscribed each year with the name of that member of the Bowdoin varsity hockey team who best exemplifies the qualities of loyalty and courage which characterized the life of Hugh Munro, Jr. (1946)

Paul Nixon Basketball Trophy: Given to the College by an anonymous donor and named in memory of Paul Nixon, L.H.D., dean at Bowdoin from 1918 to 1947, in recognition of his interest in competitive athletics and sportsmanship, this trophy is inscribed each year with the name of the member of the Bowdoin varsity basketball team who has made the most valuable contribution to this team through his qualities of leadership and sportsmanship. (1959)

Col. William Henry Owen Premium: An award established by Frederick Wooster Owen, M.D., in memory of his brother, a member of the Class of 1851, is made at Commencement to some graduating student recognized by his or her fellow students as a "humble, earnest, and active Christian." (1916)

Wallace C. Philoon Trophy: Given by Wallace Copeland Philoon, M.S., Major General, U.S.A., of the Class of 1905, this trophy is awarded each year to a nonletter winner of the current season who has made an outstanding contribution to the football team. The award is made to a man who has been faithful in attendance and training and has given his best efforts throughout the season. (1960)

William J. Reardon Memorial Football Trophy: A replica of this trophy, which was given to the College by the family and friends of William J. Reardon, of the Class of 1950, is presented each year to a senior on the varsity football team who has made an outstanding contribution to his team and his college as a man of honor, courage, and ability, the qualities which William J. Reardon exemplified at Bowdoin College on the campus and on the football field. (1958)

Reid Squash Trophy: A fund established in 1975 by William K. Simonton, of the Class of 1943, to be awarded annually to the member of the squash team who has shown the most improvement. The recipient is to be selected by the coach of the team, the director of athletics, and the Dean of the College.

Franklin Delano Roosevelt Cup: A cup, furnished by the Bowdoin chapter of Alpha Delta Phi Fraternity, is inscribed annually with the name of that member of the three lower classes whose vision, humanity, and courage most contribute to making Bowdoin a better college. (1945)

Harry G. Shulman Hockey Trophy: This trophy is awarded annually to that member of the hockey squad who has shown outstanding dedication to Bowdoin hockey. The recipient will be elected by a vote of the coach, the athletic director, and the Dean of the College. (1969)

Lucy L. Shulman Trophy: Given by Harry G. Shulman, A.M. (Bowdoin 1971), in honor of his wife, this trophy is awarded annually to the outstanding woman athlete. The recipient will be selected by the director of athletics and the Dean of the College. (1975)

Paul Tiemer, Jr., Men's Lacrosse Trophy: Given by Paul Tiemer, of the Class of 1928, in memory of his son Paul Tiemer, Jr., this trophy is awarded annually to the senior class member of the varsity lacrosse team who is judged to have brought the most credit to Bowdoin and to himself. The recipient is to be selected by the varsity lacrosse coach, the director of athletics, and the Dean of the College. (1976)

David Berdan Wenigman Memorial Wrestling Trophy: Given by Henry P. Bristol II, of the Class of 1976, in memory of his friend David Berdan Wenigman, this trophy is awarded each year to the member of the varsity wrestling team who best exemplifies the qualities of character, courage, and enthusiasm for the sport of wrestling. The recipient is chosen by the Dean of the College and the director of athletics, with the advice of the wrestling coach. (1984)

Prizes in Extracurricular Activities and Scholarship

James Bowdoin Cup: This cup, given by the Alpha Rho Upsilon Fraternity, is awarded annually on James Bowdoin Day to the student who in his previous college year has won a varsity letter in active competition and has made the highest scholastic average among the students receiving varsity letters. In case two or more students should have equal records, the award shall go to the one having the best scholastic record during his or her college course. The name of the recipient is to be engraved on the cup and the cup retained for the following year by that college group (fraternity or nonfraternity) of which the recipient is a member. (1947)

Orren Chalmer Hormell Cup: A cup, given by the Sigma Nu Fraternity at the College, in honor of Orren Chalmer Hormell, Ph.D., D.C.L., DeAlva Stanwood Alexander Professor of Government, is awarded each year to a sophomore who, as a freshman, competed in freshman athletic competition as a regular member of a team, and who has achieved outstanding scholastic honors. A plaque inscribed with the names of all the cup winners is kept on display. (1949)

Miscellaneous Prize

Abraxas Award: An engraved pewter plate is awarded to the school sending two or more graduates to the College, whose representatives maintain the highest standing during their freshman year. This award was established by the Abraxas Society. (1915)

PHI BETA KAPPA

The Phi Beta Kappa Society, national honorary fraternity for the recognition and promotion of scholarship, was founded at the College of William and Mary in 1776. The Bowdoin Chapter (Alpha of Maine), the sixth in order of establishment, was founded in 1825.

Election is on the basis of scholarly achievement, in estimating which, consideration is given primarily to grades in courses, secondarily (at graduation) to departmental honors. Elections may be held twice a year—in February and May. Candidates must have completed twenty-four semester units for college credit.

JAMES BOWDOIN DAY

Named in honor of the earliest patron of the College, James Bowdoin Day was instituted in 1941 to accord recognition to those undergraduates who distinguish themselves in scholarship. Inaugurated by Stanley Perkins Chase '05, Henry Leland Chapman Professor of English Literature (1925-1951), the exercises consist of the announcement of awards, the presentation of books, a response by an undergraduate, and an address.

The James Bowdoin Scholarships, carrying no stipend, are awarded to undergraduates who have completed a minimum of two semesters' work. The scholarships are determined on the basis of a student's entire record at Bowdoin. To be named a James Bowdoin Scholar a student must obtain three-quarters honor grades, including one-quarter high honor grades. A student must obtain two additional high honor grades to balance each grade of pass, in addition to the three-quarter honor grades.

A book, bearing a replica of the early College bookplate serving to distinguish the James Bowdoin Collection in the library, is presented to every undergraduate who has carried a full course program and has received a grade of high honors in each of his courses during the last academic year.

THE APPLIED ENVIRONMENTAL SCIENCE FUND

This fund was established in 1981 by gifts from Robert C. Porter of the Class of 1934, the Ivy Fund, Suburban Propane Gas Corporation, March & McLennan Companies, Inc., and Eberstadt Asset Management, Inc. It is to be used to support the research and instructional program of the Marine Research Laboratory and the Hydrocarbon Research Center.

FACULTY DEVELOPMENT FUND

This fund was established by Charles Austin Cary, LL.D., of the Class of 1910. The income from the fund is expended each year "for such purpose or purposes, to be recommended by the President and approved by the Govern-

ing Boards, as shall be deemed to be most effective in maintaining the caliber of the Faculty." These purposes may include, but not be limited to, support of individual research grants, productive use of sabbatical leaves, added compensation for individual merit or distinguished accomplishment, other incentives to encourage individual development of teaching capacity, and improvement of faculty salaries.

FACULTY RESEARCH FUND

This fund, founded by the Class of 1928 on the occasion of its twenty-fifth anniversary, is open to additions from other classes and individuals. The interest from the fund is used to help finance research projects carried on by members of the faculty.

UNDERGRADUATE RESEARCH ASSISTANCE

Surdna Foundation Undergraduate Research Fellowship Program

An undergraduate research fellowship program established in 1959 was renamed in 1968 the Surdna Foundation Undergraduate Research Fellowship program in recognition of two gifts of the Surdna Foundation. The income from a fund, which these gifts established, underwrites the program's costs. Fellowships may be awarded annually to highly qualified seniors. Each Surdna Fellow participates under the direction of a faculty member in a research project in which the faculty member is independently interested.

The purpose is to engage the student directly in a serious attempt to extend man's knowledge. Each project to which a Surdna Fellow is assigned must therefore justify itself independently of the program, and the fellow is expected to be a participant in the research, not a mere observer or helper. The nature of the project differs from discipline to discipline, but all should give the fellow firsthand acquaintance with productive scholarly work. Should the results of the research be published, the faculty member in charge of the project is expected to acknowledge the contribution of the Surdna Fellow and of the program.

Surdna Fellows are chosen each spring for the following academic year. Awards are made on the basis of the candidate's academic record and departmental recommendation, his or her particular interests and competence, and the availability at the College of a research project commensurate with his talents and training. Acceptance of a Surdna Fellowship does not preclude working for honors, and the financial need of a candidate does not enter into the awarding of fellowships. Surdna Fellows are, however, obligated to refrain from employment during the academic year. The stipend is $1,200 for part-time research during the academic year or full-time research in eight weeks of the summer. There are eight awards annually.

Alfred O. Gross Fund

This fund, established by Alfred Otto Gross, Ph.D., Sc.D., Josiah Little Professor of Natural Science, and members of his family, is designed to assist worthy students in doing special work in biology, preferably ornithology. Income from the fund may be used for such projects as research on Kent Island, travel to a given region or library for particular work, purchase of special apparatus, attendance at an ornithological congress or other scholarly gatherings, and publication of the results of research. Although the fund is administered by Bowdoin College, assistance from the fund is not limited to Bowdoin students.

Fritz C. A. Koelln Research Fund

This fund was established in 1972 by John A. Gibbons, Jr., of the Class of 1964, to honor Fritz C. A. Koelln, professor of German and George Taylor Files Professor of Modern Languages Emeritus, who was an active member of the Bowdoin faculty from 1929 until 1971. A maximum grant of $250 may be awarded annually to a faculty-student research team to support an interdisciplinary research project. At the discretion of the granting committee, the award may be to defray travel and research expenses, to purchase books and equipment, to pay costs of publishing research results, as a direct stipend to the students, or any combination of the above. In no case shall the award take the form of a direct stipend to the faculty member.

Edward E. Langbein Summer Research Grant

An annual gift of the Bowdoin Parents' Fund is awarded under the direction of the president of the College to undergraduates or graduates to enable the recipients to participate in summer research or advanced study directed towards their major field or life work. Formerly the Bowdoin Fathers Association Fund, the grant was renamed in 1970 in memory of a former president and secretary of the association.

Research, Educational, and Conference Facilities

BETHEL POINT MARINE RESEARCH STATION

The College's marine research facility is located approximately ten miles from the campus on a seventeen-acre parcel of land with considerable shore frontage. Two laboratories are situated on the land. All major coastal environments of Maine are represented in microcosm, offering a unique opportunity for study. In conjunction with the hydrocarbon research performed by Bowdoin's Department of Chemistry, the staff of the Bethel Point facility studies the chemical and biological consequences of oil spills on marine environments. While much of this study has been performed at the station and other points on the Maine coast, Bowdoin research teams have investigated spills in France, Puerto Rico, and various locations along the eastern seaboard of the United States.

Directed by Dr. Edward S. Gilfillan, the Bethel Point Marine Research Station provides opportunities for independent study during the academic year and some summer research positions for Bowdoin students.

BOWDOIN SCIENTIFIC STATION

The College maintains a field station at Kent Island, off Grand Manan, in the Bay of Fundy, New Brunswick, Canada, where qualified students can conduct field work on biological problems. Kent Island, containing about 200 acres and several buildings, was presented to the College in 1935 by John Sterling Rockefeller.

Kent Island is a major seabird breeding ground and the home of various land birds. Its location makes it a concentration point for migrating birds in spring and fall. The famous Fundy tides create excellent opportunities for the study of marine biology. The terrestrial habitats are surprisingly varied for an island of this size.

No formal courses are offered at the station, but students from Bowdoin and other institutions are encouraged to select problems for investigation at Kent Island during the summer and to conduct field work on their own initiative with the advice and assistance of the Department of Biology. Approved work at the station is acceptable for credit as independent study. Field trips of short duration to Kent Island are a feature of Bowdoin's courses in ecology and ornithology.

Faculty members and graduate students from other institutions have often used the facilities of the station in their research. They have helped the

undergraduate members of the station through informal instruction and as examples of experienced investigators at work.

Financial assistance for students doing research at Kent Island is available from the Alfred O. Gross Fund (see page 250). Other funds which support the Bowdoin Scientific Station are the Kent Island Fund, the Heizaburo Saito Fund, the Minot Fund, and the Roy Spear Memorial Fund.

BRECKINRIDGE PUBLIC AFFAIRS CENTER

The Breckinridge Public Affairs Center is a 23-acre estate on the tidal York River in southern Maine. The center includes a 25-room main house, formal gardens, a gymnasium, a clay tennis court, and a 110-foot circular, saltwater swimming pool. Owned and operated by Bowdoin College, the center is used for classes, seminars, and meetings of educational, cultural, and civic groups. Business and professional organizations also use the facility for planning sessions and staff development activities. River House, which accommodates nineteen overnight guests, was designed by Guy Lowell in 1905 and is on the National Register of Historic Places. The estate was given to Bowdoin in 1974 by Marvin Breckinridge Patterson, whose husband was the Honorable Jefferson Patterson of St. Leonard, Maryland. Named in honor of Mrs. Patterson's family, who built the house, the estate is available for use April 1 through July 25 and September 17 through Thanksgiving each year.

COLEMAN FARM BANDING STATION

During the course of the academic year, students conduct field study in ornithology at a site three miles south of the campus, utilizing a tract of College-owned land which extends to the sea. Numerous habitats of resident birds are found on the property, and it is a stopover point for many migratory species. Organized by students in 1975, the Coleman Farm Banding Station is equipped by the College and a generous neighbor, E. Christopher Livesay, and operates under the direction of the Department of Biology.

WCBB-TV

WCBB-TV is a public television station formed by Bates, Bowdoin, and Colby colleges in 1961. It is licensed to Colby-Bates-Bowdoin Educational Telecasting Corporation and serves approximately 750,000 people in southern Maine and eastern New Hampshire. At the time of its founding, it was the first noncommercial television station in Maine, the third in New England, and one of the earliest in the nation. It is supported primarily by contributions from viewers, an annual auction, and grants from business, industry, and foundations.

WCBB-TV broadcasts a wide variety of programs, including programs for use in the schools and for a general home audience. In addition to local programs produced by members of the staff, WCBB-TV broadcasts programs provided by the Public Broadcasting System and the Eastern Educational Telecasting Network.

Degrees Conferred in May 1986

BACHELOR OF ARTS

Jason Leland Adams '85
Morgan Goodpasture Adams
Wesley Howell Adams
Brian Christian Allaire
Christopher Eller Allen
Gary Paul Allen
Margaret Frances Allen
Frederic Peter Amstutz '85
Barbara Coffin Armstrong
Maria Teresa Arteiro
Alan Samuel Attardo '85
Jonathan Phelps Atwood
Christopher Charles Augerson '85
Steven Talbot Averill
Diane Lee Avore
Christopher Somes Babcock
Guy Laurent Babineau
Charles Parker Bacall
Michelle Baer
Belinda June Baggett
William Dean Baker
Lydia McClanahan Barnes
Michael Wesley Barnes
Kevin Moore Barry
Kevin John Beal
Jonathan Leonard Becker
Xenia Beebe
Paul Russell Beiles
Thomas Joseph Bennett
Mary Lucinda Berghel '87
William Delmont Berghoff
Jill Hinton Bermingham
Patricia Anne Callow Bernheim
Robert Brooks Bernheim
Anthony Wilson Biette
Mary Anderson Blake
Donald Burgess Blanchon
Linda Phyllis Bloch
Grant Edward Booth
Lynn Christianne Bottger
Judith Lucy Bourassa
Mark Garth Bowie
Bridget Anne Brennan
Chance Briggs
Elizabeth Ann Brimmer
Eric Douglas Brown
Susanne Ruth Brown
Michael Francis Buckley
David Stephen Buran
Maureen Ann Burke
Walter E. Burlock, Jr. '85
Nessa Helena Burns
George William Burpee II
David Robert Burton
Margaret Ann Butler
Peter Tower Butterfield
Janet Margaret Campbell
Sean Terrance Carnathan
Brinnen Stiles Carter
George Enrique Chaux
Deborah Lyn Christensen
Catherine Merrell Clark
Roger Alan Clement, Jr.
Lisa Pauline Cloutier
Michael James Cloutier
Brooke Cockburn
Curtis Leland Cole
Benjamin Johnston Conway
Catherine Devere Corbett
Mary Walsh Corcoran
Sarah Ann Cosgrove
Daniel Dexter Covell
Edward Russell Cowen
Meghan Kerry Cox
Christine Marie Craig
Clementine Gabriele Creuziger '87

Ronald Curry
James Joseph Darcey
Anne Marie Davidson
Sarah Huddleston Davie
Anne Veronica Dean
David Edward DeLorenzi
Paige Elizabeth DeMallie
Nancy Susanne Demcak
Jillian S. Demeri
Edward Joseph DesJardins, Jr.
John Duddy Devine
John Otto Doerge, Jr.
James Andrew Dolan
Carmen Dominguez
Alison Mary Downing
Susan Kelley Driscoll
Marc Laureat Ducharme
Ann Harrison Dudley
Amy Warner Dumas
Steven Donald Dyson
Scott William Eaton '85
Stanley Boyd Eaton III
William Grenville Ellis, Jr.
Lea Bulkley Erdman
Peter Lawrence Espo
Robert Gerard Ewanouski '84
Andrew Davis Falk
Eleanor Grace Falk '85
John Paul Feeney '85
Richard Fennell
Robert John Ferguson '85
Robin Fernald
Anne Elizabeth Fideler
Felicia Files
Maureen Ann Finn
Abigail Catherine Fisher
Philip Andrew Fisher
James Andrew Flaker
Wrenn Wilkinson Flemer
Todd Steven Foglesong
Susanne Folsom
Theodore Alan Frank
Charles McClaskey Friel
Sharon Ann Gagnon
Richard Joseph Ganong, Jr.
Lee William Gartley
Mariquita Anne Gates
Barbara Jean Geissler '85
Tracy Marie Gellert
Ann Gergely
Clare Pancoast Gibson
Paul Michael Gilbert
Phillip Roy Ross Ginkel
Nathan Edward Goff
Mona Jill Golub
Scott Edward Gordon
Mary Josephine Gorman
John David Gorsuch
Sarah Jane Gosse
Jennifer Hutchins Graham
Andrea Jane Greenfield
Solomon Hollis Morrison Greenlaw
Mary T. Haffey
Davis Case Hall
Keith Gordon Halperin
Thomas Edward Hamilton
Katharine McCauley Harkins
Robert J. Harrington
Elizabeth Martin Hayes
Geoffrey Field Herman
S. Andrew Hill '84
Robert James Hinkle
Diana Lynn Hobstetter
Carolyne Larned Hong
Stephen Frank Houldsworth
Robert Tracy Howard III
Paul Francis Howley
Alex Hutcheon
Matthew Anthony Iwanowicz
Jennifer Winslow Izard
Laura Elspeth Jack
Regina Catherine Jerome
Charles Traver Johnson
Erik Smalley Johnson
Theodore Edmead Johnson
Kimberly Maxfield Jones '85

Nina Lee Widdoes Jordan
Kevin Bartlett Joyce
Robert Henry Karr '85
Susan Jane Kastriner
Joseph Michael Kelly, Jr.
Barbara Jean Kennealy
Celia Stevens Kennedy
Jonathan Michael Kersun
Catherine Richardson Keuffel
Kim McNeil Kilborne
Joseph Cornell King, Jr.
David Murdock Kingsley
Valerie Joyce Kolligian
Charles Henry Korn '85
Elisif A. L. Krag
Stephen Krisko, Jr.
John Lenworth Kronick
Laura Jean Kunycky
Jeffrey Anton Kurrus
Joseph Henry LaCasce, Jr.
Thomas Doyle LaFountain
Margaret Sue Lafreniere
Andrew Harry Lane
Susan Hoyt Langbein
Scott Richard Lauzé
Maxwell Allen Laventhall
David Randall Lee
Robert Joseph Lee '87
Paul Ronald Lestan
Gary Scott Levenson
Eliza G. Leventis
Montgomery Meigs Lewis, Jr.
Curtis MacKay Libby
Maria Lynn Libby
Susan Paula Lima
Frederick Charles Lohrum, Jr.
Cheryl Anne London
Rebecca Der Love
Carol Lund
Elizabeth Anne Lynch
Gary Steven MacDonald
Kurt Bentley Mack
Sean Michael Mahoney
Matthew David Manahan
Marc Paul Mansour
Stephen William Mapel
Joseph Charles Marrow
Todd Hamilton Marshman
Mark Carl Marwede
Andrew Gesell Matthes
Susan Lloyd McBurney
Charles Howard McCain III
Susan McCallum
John Arthur McCarthy
Robert Edward McCarthy
John Francis McCluskey
Michael William McCullom
Alan James McDonald
Maureen McFarland '85
Karen Ann McGowan
Ruth Mead McKay '84
John Fitzgerald McManus
Michael Adam McNally
Leslie Margaret Medeiros '87
John Meienhofer
David Joseph Melville, Jr.
Robert George Menzi
Arria Dyer Merrill '85
Michael Tuvin Mervis
Gregory Miller
Jocelyn Andrea Miller
Michael Drake Milligan
Kenneth Charles Minton
Wm. Frank Mitchell
Henry Thomas-Adams Moniz
Bronwen Morrison
Erika Robbin Morrison
Margaret A. Moulton
Robert Scott Mower
Wayne Erik Nablo
David Scott Newman
Laura Taylor Newman
Michael Richard Newton '85
Gregory Alan Norman
Jeffrey Charles Norris
Karen Louise Northup

Kristen Jane Nunes
Ann Warren Ogden
John Joseph Oliveri
Jeffrey Andrew Olsen
Neil Byron Olson
Julian Holmes Onderdonk
Charles Robert O'Neill
Christopher Ian Oostenink
Carolyn Rask Orne '81
Mary Terese Ortiz
Maria Christina Panico
Susan Lynn Pardus
Matthew Phillip Pearl
Margaret Pease
Carl Robert Pebworth
Susan Elizabeth Peirez
Faith Alyson Perry
Deborah Palmer Philbrick
Katherine Ward Philbrick '85
Susanna Pierce
Peter Christian Proeller
Kimberly Susan Purdy
Alexander Rabinovich
Matthew Stephen Rankowitz
Robin Louise Raushenbush
Daniel Francis Rayhill
Edward James Reed
Brian Edward Renaud
Thomas Patrick Reynolds
Anne Katherine Rizoulis
J. Hilary Rockett, Jr.
Mary Joyce Rogers
Patrick Joseph Ronan
T. R. Roos '85
Christopher Andrew Rosella '85
Andrew Stewart Ross
Charles Nicholson Ross
Jayne Helen Rowe
Michèle Marie Roy
Paolo Alessandro Rushing
Joseph John Ryan, Jr.
Cheryl Elaine Ryder
Joanne Saint-Louis
Margaret Ellen Sallick
William Rogers Sanborn
Leza Marie Sarrouf
Mark Cameron Sawyer
Hanns Gregory Scharff '85
Margaret Louise Schneyer
Eric Karl Schoening '85
Amy Jill Schwartz
David Lee Schwartz
James Paul Servin
Steven Davies Sessler
Philip Wittman Setel '85
Charles David Seymour, Jr.
Dennis Richard Shea
Jeffrey Marc Sherman
Lee Brett Silverman
Suzanne Michelle Silvern
Andrew Fredrik Sims
Ike Lamba Singh
Michelle Anne Small
Laurie Frances Smith
Timothy Dean Smith
Liliana Sotomayor
Bridget Barringer Spaeth
Cheryl Beth Spector
Byron John Stookey
David Michael Stresser
Mitchell John Sullivan
Scott Edward Sutton
Maria Sophia Szabo
Ramin Tamaddon
Mark Austin Tarinelli
Amy Lisette Thompson
Seth Matthew Thompson
Ann Eva Thorne
Peter Grover Thurrell '85
Louis A. Tonry, Jr.
Mark Alexander Toor
Ian Wynkoop Torney
James William Tragakis
Andrew Scott Turkish
Francine Elizabeth Turner
Kristine Alice Tuveson

James Makoto Uyeno
An Uyterhoeven
Andrew Paul Valentine
Beth Alison Varney
Paul Scott Veidenheimer
Sylvie Ann Vidrine
Nicholas Samuel Vokey
James Gray Wagner
Nicholas Vincent Walsh
Melissa Ann Walters
Lisa Ann Walton
Mark F. Wanner
Mary Patrice Ward
Dale Stafford Webber
Amy Jane Weinstock
Carter Andrew Welch
Thomas Peter Welch
Jon David Wescott
Caroline Young Westort
Megan Whalen
Tracy Lynne Wheeler
Paige Elizabeth Whiston
Jeffrey Page Whittum
Donald Paul Willmott
R. Christopher Wilson
Jeffrey Paul Winey
Paula Case Wood
Kristen Anne Woodberry
Neal Evan Yarranton
Christopher J. P. York
Richard Cedric Zellars
Lisette Zinner
Christopher George Mitchell Zitnay
Timothy Joseph Zuckert

RECIPIENTS OF HONORARY DEGREES

Edward Clinton Andrews, Jr.
Doctor of Science

Caroline Duby Glassman
Doctor of Laws

J. C. Robin McKinley '75
Doctor of Letters

Robert Chamberlain Porter '34
Doctor of Laws

Appointments, Prizes, and Awards

PHI BETA KAPPA

Alan Samuel Attardo '85
Charles Parker Bacall
Mary Anderson Blake
Peter Tower Butterfield
Lisa Pauline Cloutier
Sarah Ann Cosgrove
Susanne Folsom
Charles McClaskey Friel
Phillip Roy Ross Ginkel
Solomon Hollis Morrison Greenlaw
Geoffrey Field Herman
Robert Tracy Howard III
Jennifer Winslow Izard
Regina Catherine Jerome
Erik Smalley Johnson
Joseph Henry LaCasce, Jr.
Scott Richard Lauzé
Susan McCallum
Robert Scott Mower
Jeffrey Charles Norris
Jeffrey Andrew Olsen
Julian Holmes Onderdonk
Mary Terese Ortiz
Carl Robert Pebworth
Matthew Stephen Rankowitz
Edward James Reed
Philip Wittman Setel '85
Lee Brett Silverman
Timothy Dean Smith
Seth Matthew Thompson
Francine Elizabeth Turner
Mary Patrice Ward
Kristen Anne Woodberry

HONORARY APPOINTMENTS

Summa Cum Laude

Alan Samuel Attardo '85
Mary Anderson Blake
Peter Tower Butterfield
Lisa Pauline Cloutier
Sarah Ann Cosgrove
Susanne Folsom
Charles McClaskey Friel
Geoffrey Field Herman
Jennifer Winslow Izard
Joseph Henry LaCasce, Jr.
Scott Richard Lauzé
Cheryl Anne London
Michael Tuvin Mervis
Robert Scott Mower
Jeffrey Charles Norris
Jeffrey Andrew Olsen
Mary Terese Ortiz
Carl Robert Pebworth
Matthew Stephen Rankowitz
Edward James Reed
Hanns Gregory Scharff '85
James Paul Servin
Lee Brett Silverman
Timothy Dean Smith
Seth Matthew Thompson
Francine Elizabeth Turner

Magna Cum Laude

Wesley Howell Adams
Charles Parker Bacall
Michael Wesley Barnes
Kevin John Beal
Jonathan Leonard Becker
Mary Lucinda Berghel '87
Robert Brooks Bernheim
Judith Lucy Bourassa
Bridget Anne Brennan
Chance Briggs
Maureen Ann Burke
Janet Margaret Campbell
Sean Terrance Carnathan
George Enrique Chaux
Michael James Cloutier
Curtis Leland Cole
Benjamin Johnston Conway
Catherine Devere Corbett
Meghan Kerry Cox
Clementine Gabriele Creuziger '87
Nancy Susanne Demcak
Philip Andrew Fisher
Wrenn Wilkinson Flemer
Theodore Alan Frank
Sharon Ann Gagnon
Richard Joseph Ganong, Jr.
Paul Michael Gilbert
Mona Jill Golub
Mary Josephine Gorman
Solomon Hollis Morrison Greenlaw
Robert Tracy Howard III
Matthew Anthony Iwanowicz
Regina Catherine Jerome
Erik Smalley Johnson
Kevin Bartlett Joyce
Susan Jane Kastriner
Jonathan Michael Kersun
Charles Henry Korn '85
John Lenworth Kronick
Andrew Harry Lane
Susan Hoyt Langbein
Robert Joseph Lee '87
Eliza G. Leventis
Maria Lynn Libby
Sean Michael Mahoney
Marc Paul Mansour
Joseph Charles Marrow
Susan McCallum
Jocelyn Andrea Miller
Michael Drake Milligan
Kenneth Charles Minton
David Scott Newman
Laura Taylor Newman
Gregory Alan Norman
Neil Byron Olson
Julian Holmes Onderdonk
Carolyn Rask Orne '81
Matthew Phillip Pearl
Andrew Stewart Ross
Margaret Louise Schneyer
Philip Wittman Setel '85
Michelle Anne Small
Liliana Sotomayor
Mitchell John Sullivan
Andrew Paul Valentine
Melissa Ann Walters
Lisa Ann Walton
Mark F. Wanner
Amy Jane Weinstock
Donald Paul Willmott
Kristen Anne Woodberry

Cum Laude

Jason Leland Adams '85
Margaret Frances Allen
Guy Laurent Babineau
Michelle Baer
Belinda June Baggett
Xenia Beebe

Thomas Joseph Bennett
Elizabeth Ann Brimmer
Deborah Lyn Christensen
Edward Russell Cowen
Anne Marie Davidson
John Duddy Devine
Susan Kelley Driscoll
Ann Harrison Dudley
Amy Warner Dumas
Eleanor Grace Falk '85
John Paul Feeney '85
Abigail Catherine Fisher
Barbara Jean Geissler '85
Thomas Edward Hamilton
Robert James Hinkle
Diana Lynn Hobstetter
Carolyne Larned Hong
Alex Hutcheon
Laura Elspeth Jack
Nina Lee Widdoes Jordan
Valerie Joyce Kolligian
Jeffrey Anton Kurrus
Margaret Sue Lafreniere
Maxwell Allen Laventhall
Carol Lund
Matthew David Manahan
Charles Howard McCain III
John Arthur McCarthy
John Meienhofer
Wm. Frank Mitchell
Henry Thomas-Adams Moniz
Margaret A. Moulton
Charles Robert O'Neill
Susan Lynn Pardus
Katherine Ward Philbrick '85
Charles Nicholson Ross
Joseph John Ryan, Jr.
David Lee Schwartz
Steven Davies Sessler
Jeffrey Marc Sherman
Bridget Barringer Spaeth
David Michael Stresser
Amy Lisette Thompson
Louis A. Tonry, Jr.
Andrew Scott Turkish
Paul Scott Veidenheimer
Nicholas Samuel Vokey
James Gray Wagner
Dale Stafford Webber
Paige Elizabeth Whiston
Jeffrey Page Whittum
Jeffrey Paul Winey
Christopher George Mitchell Zitnay
Timothy Joseph Zuckert

HONORS IN MAJOR SUBJECTS

Afro-American Studies: *High Honors,* Wm. Frank Mitchell, Faith Alyson Perry.
Honors, Kurt Bentley Mack.

Anthropology: *Highest Honors,* Philip Wittman Setel '85.

Biochemistry: *High Honors,* Jeffrey Anton Kurrus.
Honors, Donald Burgess Blanchon, Alex Hutcheon.

Biology: *Highest Honors,* Phillip Roy Ross Ginkel, Cheryl Anne London.
High Honors, Michael Richard Newton '85, Liliana Sotomayor.
Honors, Theodore Edmead Johnson, Andrew Harry Lane, Christopher George Mitchell Zitnay.

Chemistry: *Highest Honors,* Charles McClaskey Friel, Robert James Hinkle.

High Honors, Xenia Beebe, Bridget Anne Brennan, Sarah Ann Cosgrove, Jennifer Winslow Izard, Mary Patrice Ward.
Honors, Nancy Susanne Demcak.

Classics: *High Honors,* Charles Parker Bacall.
Honors, Mary Josephine Gorman.

Economics: *Highest Honors,* Jeffrey Charles Norris.
Honors, Matthew Anthony Iwanowicz.

English: *Honors,* Wesley Howell Adams, Judith Lucy Bourassa, Elizabeth Ann Brimmer, Theodore Alan Frank, James Paul Servin, Donald Paul Willmott.

German: *High Honors,* Robert Brooks Bernheim.
Honors, John Meienhofer.

Government: *High Honors,* Solomon Hollis Morrison Greenlaw, Paul Scott Veidenheimer.
Honors, Carol Lund, Elizabeth Anne Lynch, Michael Drake Milligan, Bronwen Morrison, Jeffrey Marc Sherman, Andrew Paul Valentine, Tracy Lynne Wheeler, Paula Case Wood.

History: *High Honors,* Barbara Jean Geissler '85, Erik Smalley Johnson, Susan Jane Kastriner, Jeffrey Andrew Olsen.
Honors, Kevin John Beal, George William Burpee II, Brinnen Stiles Carter, John Otto Doerge, Jr., Daniel Francis Rayhill, William Rogers Sanborn, Scott Edward Sutton.

Mathematics: *Honors,* Seth Matthew Thompson.

Music: *Highest Honors,* Gregory Miller.

Physics: *Highest Honors,* Joseph Henry LaCasce, Jr.

Psychobiology: *Highest Honors,* Scott Richard Lauzé.

Psychology: *Honors,* Curtis Leland Cole, Edward Russell Cowen, Robert John Ferguson '85, Philip Andrew Fisher, Robert Scott Mower, Margaret Louise Schneyer.

Romance Languages: *High Honors,* Amy Jane Weinstock.
Honors, Diane Lee Avore.

Russian: *Honors,* Todd Steven Foglesong.

Studio Art: *High Honors,* Nina Lee Widdoes Jordan.
Honors, Catherine Merrell Clark, Mariquita Anne Gates, Diana Lynn Hobstetter.

APPOINTMENTS, PRIZES, AND AWARDS

Graduate Scholarships

Arts and Sciences

Charles Carroll Everett Scholarship: Peter Tower Butterfield.

Timothy and Linn Hayes Scholarship: Curtis Leland Cole.

Guy Charles Howard Scholarship: Michelle Anne Small.

Wilmot Brookings Mitchell Graduate Scholarship: Matthew Kobin '83, Gregory Bentley Stone '82.

Galen C. Moses Postgraduate Scholarship: Mary Elizabeth Morton '83.

O'Brien Graduate Scholarships: Ejaz Ahmad '85, Wanda Anna Bubriski '80, Pamela Mary Caputo '84, Ella Lucinda Frederickson '84, Kweku Joseph Hanson '85, Eliza G. Leventis, Kurt Bentley Mack, Wm. Frank Mitchell, Stephen John Trichka '84.

Nathan Webb Research Scholarship in English: Matthew Kobin '83, Gregory Bentley Stone '82.

Law and Medicine

Garcelon and Merritt Fund Scholarships: Richard Pierson Beveridge '80, Nathan Jon Blum '84, Douglas John Evans '80, Jeffrey Scott Gorodetsky '81, Peter Andrew Hoenig '78, Peter Gordon Larcom '81, Donald Paul Lombardi '82, Timothy Dean Meakem '83, Kenneth David Novak '85, Brian Patrick O'Donnell '76, John Franklin Pappas '85, Michael David Popitz III '77, Daniel Stephan Pratt '85, Pierre Eusèbe Provost V '83, Nathaniel Halpern Robin '85, Jonathan Jordan Shoukimas '67, Michael Hayes Sisitsky '78, David Kenneth Spencer '80, James Paul Theofrastous '83, Mark Douglas Totten '84, Terence Keith Trow '82.

George and Mary Knox Scholarships: Ann Catherine Bonis '85, Teresa Marie Cavalier '80, Barbara Jean Kelly '84, Edward Campbell Lenk, Jr. '83, Jill Wisler Lepard '82, William E. McLaughlin '82, Judith M. Peters '82, Margaret Joan Retondo '78, John Herbert Shaw '80.

Lee G. Paul Scholarships: Marijane Leila Benner '83, Susanne Folsom, Judith Roxanne Hogan '85, William H. Songer '83, Douglas Paul Taber '77.

Peters Fund Scholarships: Margaret Ann Clavette '84, Mark David Poulin '83, Eric Tamerlane Shapiro '83.

Robinson-Davis Fund Scholarships: Natalie Louise Burns '80, Bernard Maney

Devine, Jr. '83, Gretchen Lyons Jones '79, Matthew David Manahan, Deborah Revere Moen '83, Henry Thomas-Adams Moniz, Robert Allen Parks '85.

Van Swearingen Fund: Mats Agren '83, Judith Marie Austin '84, Jill Elizabeth Barstow '85, Kermit Brien Brunelle '83, Alisande Anne Buchanan '83, Rocco Gerard Ciocca '82, John Philip Coffey '78, Caroline Mersereau Foote '81, Marguerite Jeanne McNeely '81, Cheryl Ann Menice '82, Andrea Wilmot Phipps '83, Margaret Jackson Schoeller '81.

General

Beinecke Memorial Scholarship: James Cornelius Kelly '87.

Undergraduate Awards

Commencement Awards

Goodwin Commencement Prize: Geoffrey Field Herman.

Class of 1868 Prize: Jason Leland Adams '85.

DeAlva Stanwood Alexander Prize: 1st: Kurt Bentley Mack; 2nd: Barbara Jean Geissler '85.

Andrew Allison Haldane Cup: Elizabeth Ann Brimmer, Wm. Frank Mitchell.

Alternate Commencement Speaker: Barbara Jean Geissler '85.

Class Marshal: Peter Lawrence Espo.

Departmental Prizes

Edgar O. Achorn Prize in Religion: Nord Erik Samuelson '87.

Dorothy Haythorn Collins Award: Catherine Anne Roberts '87.

Lea Ruth Thumim Biblical Literature Prize: Suzanne F. Colburn '87.

James Malcolm Moulton Prize in Biology: Teresa Elaine Bsullak '87, Kirsten Mariana Silvius '87.

Donald and Harriet S. Macomber Prize in Biology: Scott Richard Lauzé, Cheryl Anne London.

U.S. Chemical Rubber Company Freshman Achievement Award: Damon Geoffrey Guterman '89.

U.S. Chemical Rubber Company Laboratory Award: Sharon Elizabeth Anthony '89.

American Chemical Society-Undergraduate Award in Analytical Chemistry: Matthew Henry James Cordes '87.

American Institute of Chemists Award: Sarah Ann Cosgrove.

Kamerling Laboratory Award: John Joseph Rabasco '88.

Merck Index Award: Sarah Ann Cosgrove, Charles McClaskey Friel.

Philip W. Meserve Prize in Chemistry: Melissa Ann Guite '87.

William Campbell Root Award: Charles McClaskey Friel, Robert James Hinkle.

Nathan Goold Classics Prize: Mary Josephine Gorman.

Noyes Political Economy Prize: Susanne Folsom, Jeffrey Charles Norris.

Academy of American Poets' Prize: Neil Byron Olson.

Brown Composition Prize: Amy Beth Kimball '86.

General R. H. Dunlap Prizes: Curtis Leland Cole, Mary Elaine Demers '87, Susan Margaret O'Hara '88.

Hawthorne Prize: Moritz Henrik Hansen '86.

Poetry Prize: Paul Bennett Korngiebel '88.

Pray English Prize: Judith Lucy Bourassa, Theodore Alan Frank.

Forbes Rickard, Jr., Poetry Prize: Edward James Reed.

David Sewall Premium: Elizabeth Low Dreier '89.

Mary B. Sinkinson Short Story Prize: Devasundari Arasanayagam.

Bertram Louis Smith, Jr., Prize in English Literature: Amy Lynn Scattergood '87.

Paul Andrew Walker Award: Donald Paul Willmott.

Hiland Lockwood Fairbanks Prizes in Public Speaking: Solomon Hollis Morrison Greenlaw, Timothy Dean Smith.

Goodwin French Prize: Liesl Janice Kloosterman '89.

Eaton Leith French Prize: Kirsten Mariana Silvius '87.

Charles Harold Livingston Prize in French: Diane Lee Avore.

German Consular Certificate: Wrenn Wilkinson Flemer.

The Old Broad Bay Prizes in Reading German: John Meienhofer, Mary Terese Ortiz, Ellen Maura Pettingill '89.

Philo Sherman Bennett Prize for Best Essay on Principles of Free Government: Andrew Barry '86.

Jefferson Davis Award: Solomon Hollis Morrison Greenlaw.

Fessenden Prize in Government: Andrew Scott Turkish.

Sewall Greek Prize: Edward Francis McDonnell '88.

Class of 1875 Prize in American History: Susan Jane Kastriner.

James E. Bland History Prize: Jeffrey Andrew Olsen.

Hannibal Hamlin Emery Latin Prize: Thomas John Riddle '87.

Sewall Latin Prize: Peter Bruce LaMontagne '88.

Edward Sanford Hammond Mathematics Prize: Seth Matthew Thompson.

Smyth Mathematics Prize: Andrew David Zacks '88.

Art History Junior-Year Prize: Andrew J. Walker '87.

Philip W. Cummings Prize in Philosophy: Geoffrey Field Herman.

Edwin Herbert Hall Physics Prize: Ghufran Ahmed '88.

Sumner I. Kimball Prize for Excellence in Natural Sciences: Joseph Henry LaCasce, Jr.

Noel C. Little Prize in Experimental Physics: Francine Elizabeth Turner.

Fritz C. A. Koelln Research Fund Fellowship: Todd Steven Foglesong.

Edward E. Langbein Summer Research Grant: Caroline Young Westort.

Earle S. Thompson Student Fund: David Gregory Fall '87, Tara Jean O'Donnell '87.

James Bowdoin Cup: Cheryl Anne London.

Orren Chalmer Hormell Cup: Joanna Marie DeWolfe '88.

Roliston G. Woodbury Memorial Award: Lee Brett Silverman.

Women's Basketball Alumnae Award: Christine Marie Craig.

Society of Bowdoin Women Athletic Award: Anne Marie Davidson.

Leslie A. Claff Track Trophy: Erik Anthony Gans '88.

Annie L. E. Dane Trophy: Christine Marie Craig.

Francis S. Dane Baseball Trophy: David Robert Burton, Thomas Peter Welch.

William J. Fraser Basketball Trophy: Thomas Peter Welch.

Lucien Howe Prize: Barbara Jean Geissler '85.

Winslow R. Howland Football Trophy: Robert Brooks Bernheim.

Elmer Longley Hutchinson Cup (Varsity Track): Eric Karl Schoening '85.

Samuel A. Ladd Tennis Trophy: Kevin Moore Barry, Peter Lawrence Espo, Mitchell John Sullivan.

J. Scott Kelnberger Memorial Ski Trophy: Ann Warren Ogden, Mark Austin Tarinelli.

George Levine Memorial Soccer Trophy: Ian Wynkoop Torney.

Robert B. Miller Trophy (Swimming): William Delmont Berghoff.

Hugh Munro, Jr., Memorial Trophy (Hockey): J. Hilary Rockett, Jr.

Paul Nixon Basketball Trophy: David Robert Burton.

Col. William Henry Owen Premium: Geoffrey Field Herman, Matthew Anthony Iwanowicz.

Wallace C. Philoon Trophy (Football): Ryan King Stafford '89.

William J. Reardon Memorial Football Trophy: Mark Carl Marwede.

Reid Squash Trophy: Peter Lawrence Espo, David Murdock Kingsley.

Franklin Delano Roosevelt Cup: Lindsey Robert Baden '87.

Harry G. Shulman Hockey Trophy: Joseph Cornell King, Jr.

Lucy L. Shulman Trophy: Jill Hinton Bermingham.

Paul Tiemer, Jr., Men's Lacrosse Trophy: Steven Donald Dyson.

David Berdan Wenigmann Memorial Wrestling Trophy: Steven Davies Sessler.

Abraham Goldberg Prize: Mona Jill Golub, Kristine Alice Tuveson.

Masque and Gown One-Act Play Prizes: *Playwright,* David Jeffrey Mittel '89; *director,* Peter Grover Thurrell '85; *actress,* Meghan Kerry Cox; *actor,* Christopher Phillips Lierle '89; *honorable mention,* Kevin Bartlett Joyce.

Director of Theater Special Award: Charles Henry Korn '85.

Alice Merrill Mitchell Prize: Jason Leland Adams '85, Meghan Kerry Cox, James Andrew Dolan, Kevin Bartlett Joyce.

William H. Moody Award: R. Christopher Wilson.

George H. Quinby Award: Albert Phillip Mauro, Jr. '89, David Jeffrey Mittel '89.

The Bowdoin Orient Prizes: Michael O'Doherty Moore '87, Albert Phillip Mauro, Jr. '89, Barie-Lynne Dolby '89, Robert Foster Shay, Jr. '87, Lori Marie Bodwell '88, Kevin Paul Wesley '89.

Summer Surdna Foundation Research Fellowships: David Keith Bonauto '87, Matthew Henry James Cordes '87, Melissa Anne Guite '87, Ward Loomis Reed III '87, Elizabeth Eileen Sheehan '87, Patrice Marie Thibodeau '87.

Surdna Foundation Undergraduate Research Fellowships: Christine Sharon Chow '87, Philip Alcide Morin '87, David Gunther Pohle '87, Frances Willa Reis '87, Michael David Rivard '87, Paula Marie Tremblay '87.

Pew Fellowships: Christine Sharon Chow '87, Phillip Roy Ross Ginkel, Theresa Ann Nester '88, Patricia Carolina Marquez '88, Carol Jean Mecsas '89, Kirsten Mariana Silvius '87.

Prizes in General Scholarship

Brooks-Nixon Prize: Lee Brett Silverman.

Almon Goodwin Phi Beta Kappa Prize: Lisa Pauline Cloutier.

George Wood McArthur Prize: Peter Tower Butterfield.

Leonard A. Pierce Memorial Prize: Peter Tower Butterfield.

Alumni Organizations

ALUMNI ASSOCIATION

The Bowdoin College Alumni Association has as its purpose "to further the well-being of the College and its alumni by stimulating the interest of its members in the College and in each other." Membership is open to former students who during a minimum of one semester's residence earned at least one academic credit toward a degree, to those holding Bowdoin degrees, and to anyone elected to membership by the Executive Committee of the Alumni Council.

The officers of the Alumni Council are ex officio the officers of the Alumni Association. The council members-at-large, directors of the Alumni Fund, a faculty member, treasurer, director of Annual Giving, and director of Alumni Relations serve as the Executive Committee of the council and the association.

ALUMNI COUNCIL

Officers: Steven C. Munger '65, president; Walter E. Bartlett '53, vice president; Ann Wohltman Springer, secretary and treasurer.

Members-at-Large: *Terms expire in 1987:* Robert C. Delaney '55, Peter E. Driscoll '69, John J. Mullane, Jr. '50, Steven C. Munger '65. *Terms expire in 1988:* Walter E. Bartlett '53, Kenneth M. Cole '69, Susan Williamson Peixotto '79, Thomas J. Sheehy, Jr., M.D. '41. *Terms expire in 1989:* Michael S. Cary '71, Theo A. de Winter '54, Edward M. Fuller II '60, Robert H. Millar '62. *Terms expire in 1990:* Anne R. Devine '81, William S. Faraci '69, Edward W. Rogers '51, Paula M. Wardynski '79.

Other members of the council are the editor of the *Bowdoin Alumni Magazine,* a representative of the faculty, the secretary of the College, the director of Annual Giving, the directors of the Alumni Fund, representatives of recognized alumni clubs, and three undergraduates.

ALUMNI COUNCIL AWARDS

Alumni Service Award: First established in 1932 as the Alumni Achievement Award and changed in name to the Alumni Service Award in 1953, this award is made annually to the person who, in the opinion of alumni, as expressed by the Alumni Council, best represents the alumnus or alumna whose services to Bowdoin most deserve recognition.

The recipient in 1986 was Laurie A. Hawkes '77.

Alumni Award for Faculty and Staff: Established by the Alumni Council

in 1963, it is presented each year "for service and devotion to Bowdoin, recognizing that the College in a larger sense includes both students and alumni." The award is made at the annual Homecoming Luncheon in the fall and consists of a Bowdoin clock and a framed citation.

The recipient in 1986 was William R. Mason III '63.

Distinguished Bowdoin Educator Award: Established in 1964 to recognize outstanding achievement in education by a Bowdoin alumnus, except alumni who are members of the Bowdoin faculty and staff, the award consists of a framed citation and $500. In 1985, the council voted to honor achievement both at the college/university level and the primary/secondary level.

The recipients in 1986 were Peter D. Relic '58 at the college/university level and, at the primary/secondary level, John L. Thomas '48.

BOWDOIN ALUMNI MAGAZINE

Established in 1927, the quarterly *Bowdoin Alumni Magazine* publishes articles of general interest about the College and its alumni. It is sent without charge to all alumni, parents of current students, faculty and staff members, and various friends of the College. Other alumni publications include the quarterly *Campaign Reporter, The Whispering Pines,* and regional newsletters. The magazine is currently edited by Charles C. Calhoun.

BOWDOIN ALUMNI SCHOOLS AND INTERVIEWING COMMITTEES (BASIC)

BASIC is a volunteer association of approximately 750 alumni in the United States and several foreign countries which assists the Admissions Office in the identification and evaluation of candidates. BASIC responsibilities include providing alumni interviews for applicants when distance or time precludes a visit to Brunswick, representing the College at local "college fair" programs, and, in general, serving as a liaison between the College and the public.

Those interested in learning more about the BASIC organization should contact Thomas L. Deveaux, associate director of admissions.

ALUMNI FUND

The Alumni Fund, inaugurated in 1869 and reorganized in 1919, has contributed more than $24,000,000 for the current purposes and capital needs of the College through June 1986. The fund seeks either completely unrestricted or current purpose gifts.

Officers: David E. Warren '76, chairman; Edgar M. Reed '69, vice chairman.

Directors: David E. Warren '76 (term expires in 1987), Edgar M. Reed

'69 (term expires in 1988), H. Erik Lund '57 (term expires in 1989), Donald B. Snyder, Jr. '50 (term expires in 1990), Joan Benoit Samuelson '79 (term expires in 1991).

ALUMNI FUND AWARDS

Alumni Fund Cup: Awarded annually since 1932, it is given to the reunion class with the most money in the Alumni Fund. The award is presented in the fall.

The recipient in 1985 was the Class of 1950, Donald B. Snyder, Jr., agent.

Leon W. Babcock Plate: Presented to the College in 1980 by William L. Babcock, Jr. '69 and his wife, Suzanne, in honor of his grandfather Leon W. Babcock '17, it is awarded annually to the class making the largest dollar contribution to the Alumni Fund.

The recipient in 1985 was the Class of 1950, Donald B. Snyder, Jr., agent.

Class of 1916 Bowl: Presented to the College by the Class of 1916 in 1959, it is awarded annually to the class whose record in the Alumni Fund shows the greatest improvement over its performance of the preceding year.

The recipient in 1985 was the Class of 1960, Glenn K. Richards, agent.

Class of 1929 Trophy: Presented by the Class of 1929 in 1963, it is awarded annually to that one of the ten youngest classes attaining the highest percentage of participation.

The recipient in 1985 was the Class of 1978, James C. Palmer, agent.

Robert Seaver Edwards Trophy: Awarded annually to that one of the ten youngest classes raising the most money for the Fund, this trophy honors the memory of Robert Seaver Edwards '00.

The recipient in 1985 was the Class of 1977, Laurie A. Hawkes, agent.

Fund Directors' Trophy: Established in 1972 by the directors of the Alumni Fund, the trophy is awarded annually to the class which in the opinion of the directors achieved an outstanding performance not acknowledged by any other trophy.

The recipient in 1985 was the Class of 1954, David W. Donahue, agent.

THE PRESIDENT'S CUPS FOR ALUMNI GIVING

Established by the Development Committee of the Governing Boards in 1985, two cups are awarded annually—one for classes out of college 49 years or less, and one for classes out of college 50 years or more. The awards are presented on the basis of the total giving effort of a class, with all gifts actually received by or for the benefit of the College during the academic year eligible.

The recipients in 1985 were the class of 1922 and the class of 1964.

SOCIETY OF BOWDOIN WOMEN

The Society of Bowdoin Women was formed in 1922. Its purpose is to provide "an organization in which women with a common bond of Bowdoin loyalty may, by becoming better acquainted with the College and with each other, work together to serve the College."

The society has made specific gifts to the College, such as silver and china for the presidents' house. In 1961 it established the Edith Lansing Koon Sills Lecture Fund, honoring Mrs. Kenneth C. M. Sills, wife of a former president of the College, and in 1971, following the decision to admit women undergraduates, the society created a scholarship fund restricted to qualified women students. In 1978 the Society of Bowdoin Women Athletic Award was established to recognize effort, cooperation, and sportsmanship by a senior member of a women's varsity team. In 1983 the society established the Frank F. Sabasteanski Polar Bear Run in honor of the long-time Bowdoin track coach. And in 1985, the Dorothy Haythorn Collins Award was created to honor a junior student of outstanding quality in his or her chosen field of study. Contributions have also been made to the Elisabeth Clark Wilder Scholarship Fund in memory of Mrs. Philip S. Wilder, a former president and long-time member of the society. Funds have also been used to increase the scholarship endowment; to add to the Daggett Book Fund in memory of Mrs. Athern P. Daggett, the vice president-at-large at the time of her death; to purchase equipment for the Office of Career Services; to co-sponsor the New York Contemporary Choreographers Series; and to sponsor the L. L. Bean fashion show featuring college models.

Membership is open to any interested person by the payment of annual dues of $3.00. The programs and activities are made possible by the dues, contributions, and bequests.

Officers: Mrs. Olin M. Sawyer, president; Mrs. A. LeRoy Greason, honorary president; Mrs. Edward W. Rogers, vice president; Mrs. Robert Brownell, secretary; Mrs. John I. Riddle, treasurer; Mrs. Thomas Deveaux, assistant treasurer; Mrs. Paul H. Noone, activities coordinator; Mrs. Michael H. Walsh, assistant activities coordinator; Mrs. William T. Hale, membership; Mrs. Mark L. Haley, nominating; and Mrs. Dana Mayo, past president.

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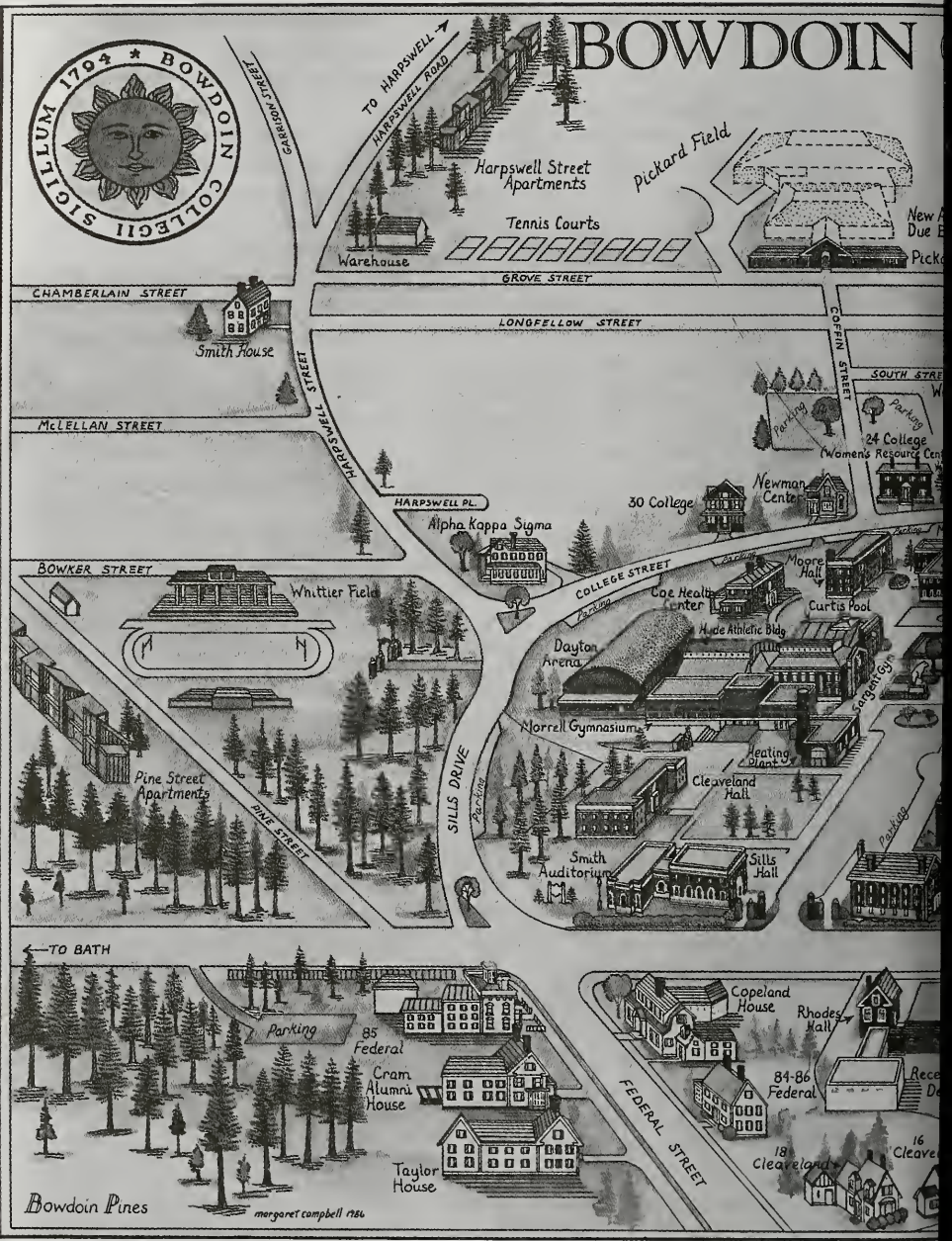
BOWDOIN
SIGILLUM 1794 ★ BOWDOIN COLLEGII
TO HARPSWELL
HARPSWELL ROAD
GARRISON WARD STREET
Harpswell Street Apartments
Pickard Field
Tennis Courts
Warehouse
GROVE STREET
CHAMBERLAIN STREET
LONGFELLOW STREET
COFFIN STREET
Smith House
HARPSWELL STREET
McLELLAN STREET
HARPSWELL PL.
Alpha Kappa Sigma
30 College
Newman Center
24 College
SOUTH STREET
BOWKER STREET
Whittier Field
COLLEGE STREET
Coe Health Center
Moore Hall
Curtis Pool
Hyde Athletic Bldg
Dayton Arena
Sargent Gym
Morrell Gymnasium
Heating Plant
Pine Street Apartments
PINE STREET
SILLS DRIVE
Cleaveland Hall
Smith Auditorium
Sills Hall
Parking
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Cram Alumni House
Taylor House
Bowdoin Pines
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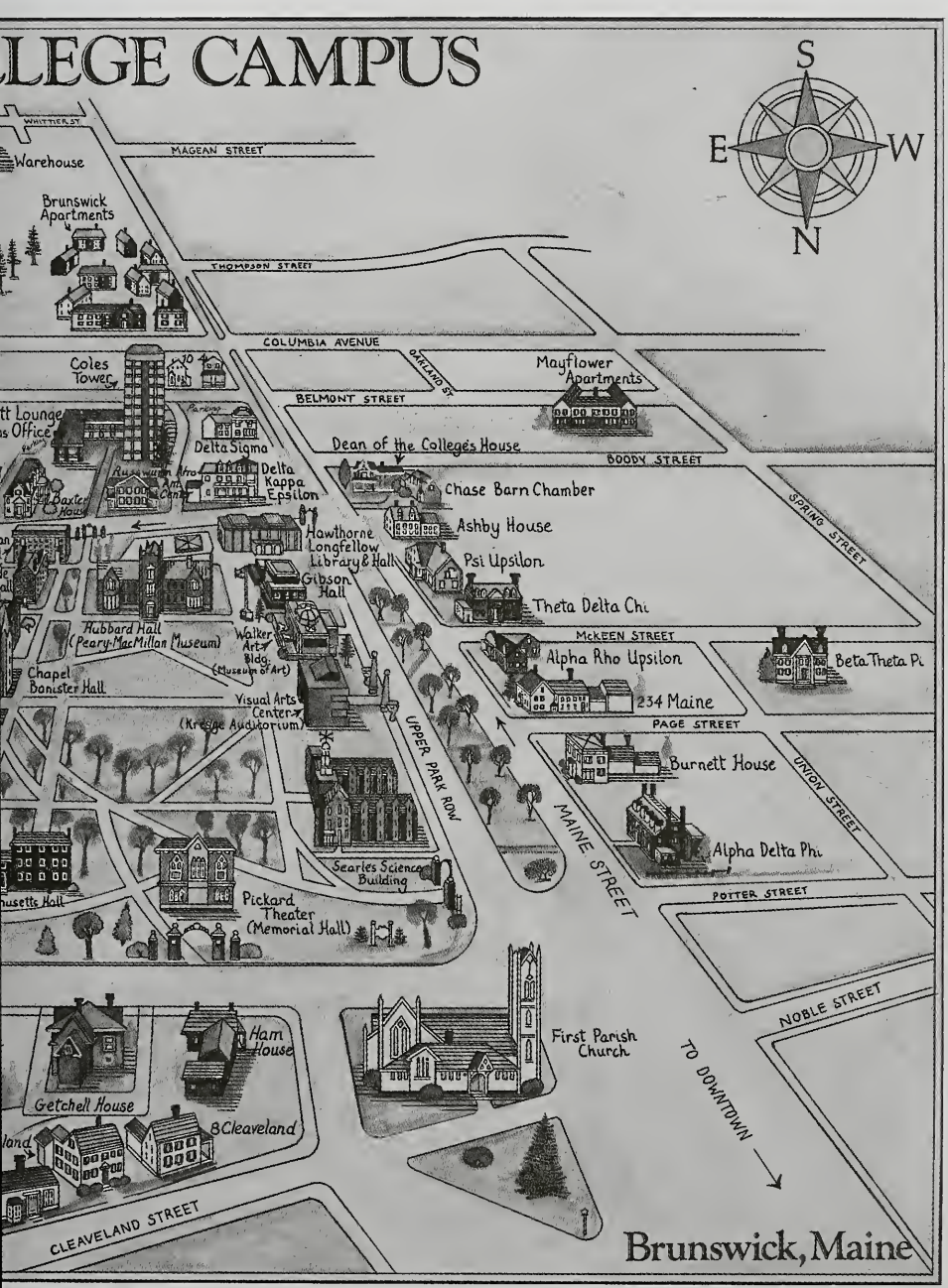
Copeland House
Rhodes Hall
84-86 Federal
FEDERAL STREET
18 Cleaveland
16 Cleave


LEGE CAMPUS
S
E
W
N
WHITTIER ST
Warehouse
MAGEAN STREET
Brunswick Apartments
THOMPSON STREET
COLUMBIA AVENUE
OAKLAND ST
Coles Tower
Mayflower Apartments
BELMONT STREET
Dean of the Colleges House
BOODY STREET
Delta Sigma
Delta Kappa Epsilon
Chase Barn Chamber
Ashby House
SPRING STREET
Hawthorne Longfellow Library & Hall
Psi Upsilon
Gibson Hall
Theta Delta Chi
McKEEN STREET
Alpha Rho Upsilon
Beta Theta Pi
Hubbard Hall (Peary-MacMillan Museum)
Walker Art Bldg. (Museum of Art)
234 Maine
Chapel
Bannister Hall
Visual Arts Center (Kresge Auditorium)
PAGE STREET
Burnett House
UPPER PARK ROW
MAINE STREET
UNION STREET
Alpha Delta Phi
Searles Science Building
POTTER STREET
Pickard Theater (Memorial Hall)
NOBLE STREET
Ham House
First Parish Church
TO DOWNTOWN
Getchell House
8 Cleaveland
CLEAVELAND STREET
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